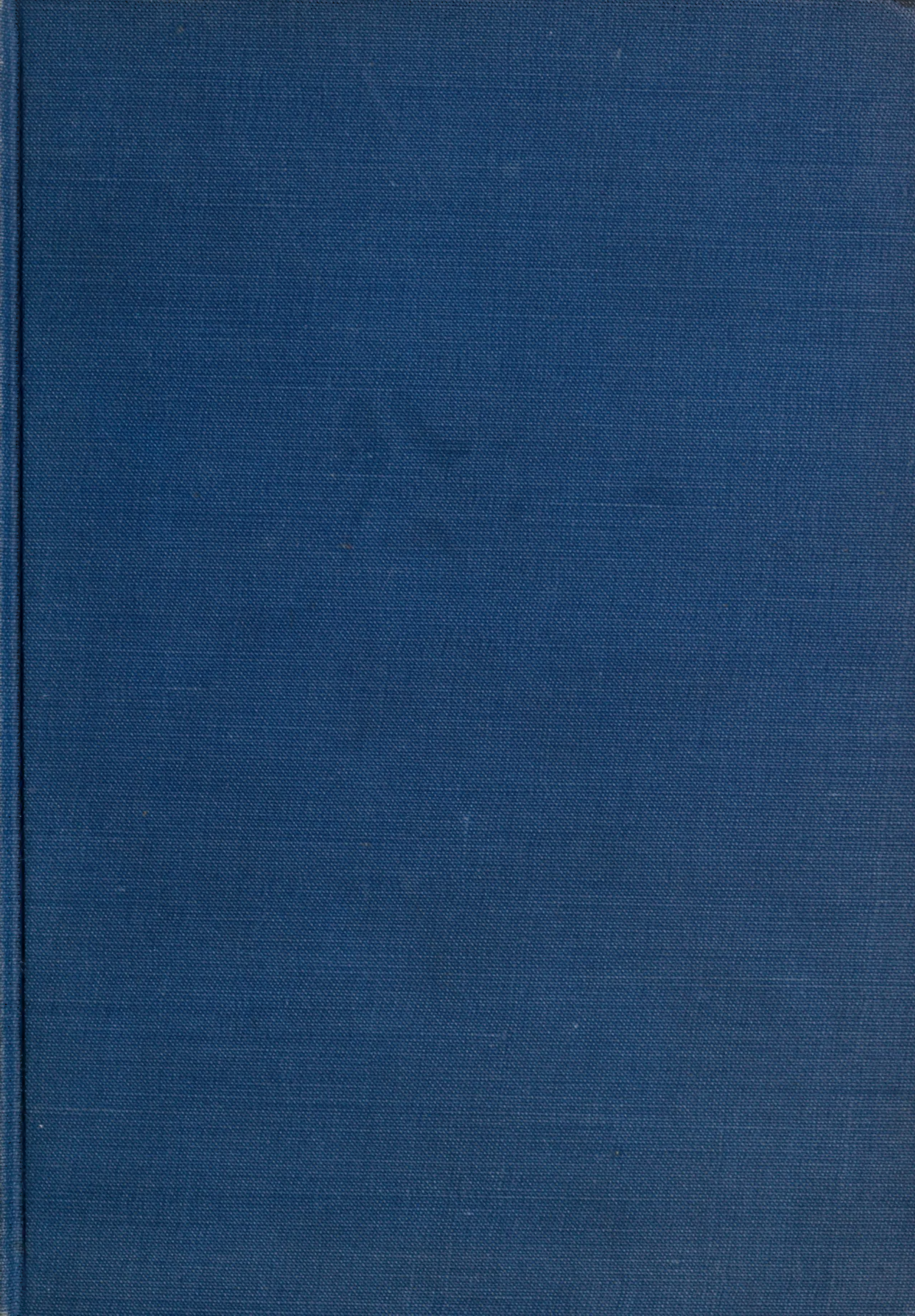

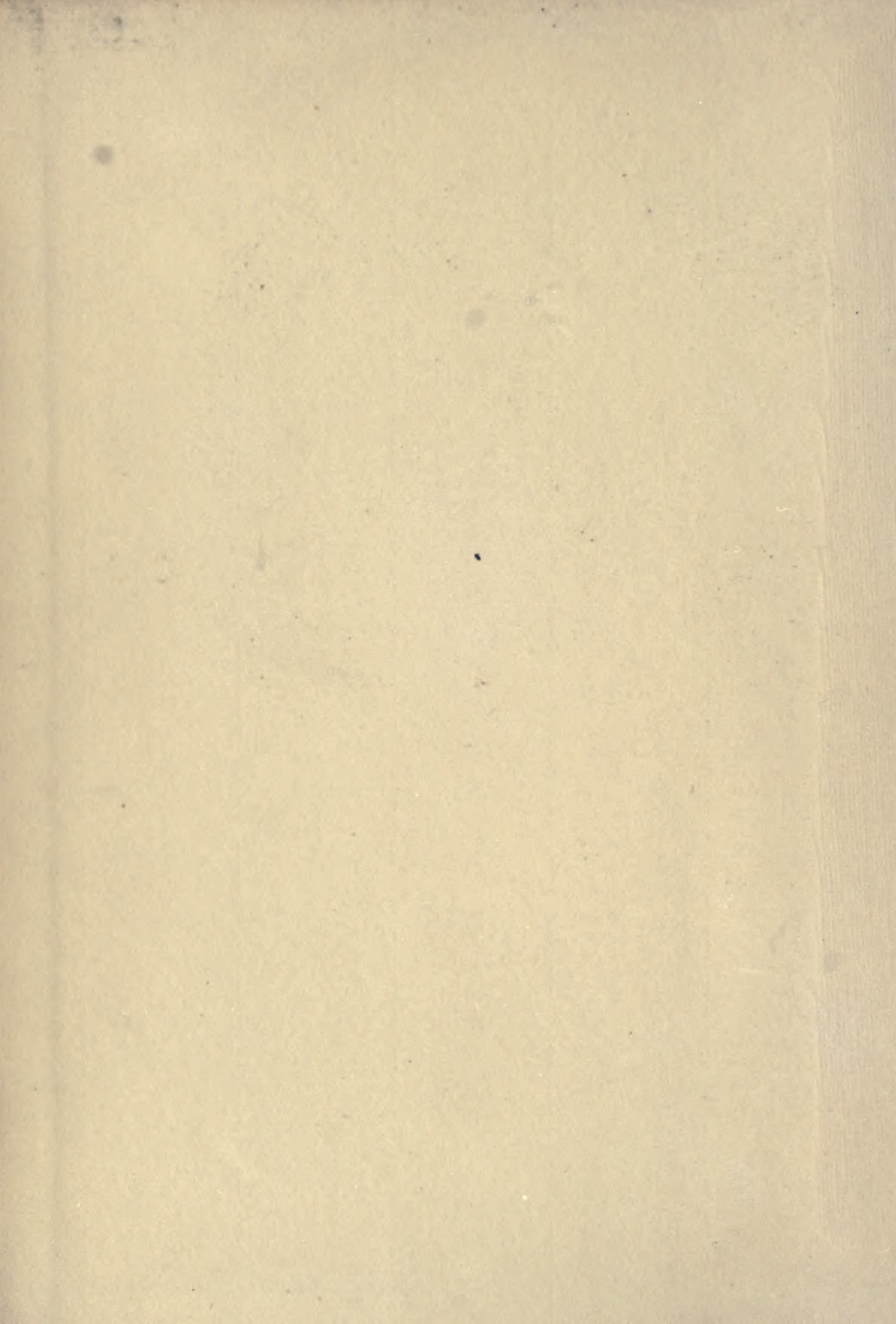

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The Bond Buyers' Dictionary

Edited by
S. A. NELSON
Author of The A B C of Wall Street
The A B C of Stock Speculation and
The A B C of Options and Arbitrage

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PREFACE

THIS little book was compiled from 1899 to 1907 from the most authoritative available sources. Difficulty was experienced in the selection of text, as much that seemed desirable was omitted owing to the scope and limitations of the volume. It is the result of many requests from investors and students for such information in this form, following the publication of the editor's "A B C of Wall Street." For many of the facts presented and their form credit is due *The Wall Street Journal* (especially for the analyses of railroad bonds), *The Evening Post*, *The Bankers' Magazine*, *The World's Work*, *The Financial Chronicle*, Alexander Dana Noyes, Thomas F. Woodlock, Charles F. Dow, Sereno Pratt, H. C. Nicholas, *The New York Times*, Mark Sullivan, *The Review of Reviews*, M. C. Payne, U. S. Consular Reports, *Moody's Manual*, *Poor's Manual*, *The Railroad Age*, *The Railroad Gazette*, *The Wall Street Summary*, *The Financier*, *American Investments*, *The Bank Clerks' Bulletin*, *The New York Mail*, Herbert C. Wright, John Grant Dater. *The Annals of the American Academy of Political Science*, *Bradstreet's*, C. M. Harger, and a number of bankers and brokers.

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THE BOND BUYERS' DICTIONARY

PART I

Government Bonds

Government Bonds Representing Debts and Loans. — A study from M. P. P. Leroy-Beaulieu and other French economists, by Charles Bates Dana. States must borrow because they have no reserves, existing, as they do, only by very elastic revenues. They cannot reduce their expenses as easily as can an individual. A State is the only judge of its debts; it is imperishable, and so can borrow in many different ways. It is bad finance to keep a great hoard in the nation's vaults in time of peace, because it restricts circulation and breeds extravagance.

A home loan has both good and bad features, for, while it conserves economy among the common people, it takes from them that aggressive boldness which makes successes of international investors. The French are well known to be timid and fearful about an investment beyond their confines and which does not bear the stamp of the Bank of France as a certificate of its character. The Belgians are more enterprising in that they will accept a good foreign risk. One never hears of the Belgian government decreasing its available money supply by means of domestic loans.

England has always been the lender of the world. She not only has great wealth, but she is proudly confident of her ability to make the best use of her stewardship. She has placed Turkey, Argentine Republic, Brazil, Portugal, and Greece on their feet, thereby winning their friendship, which has netted England greater returns than the heavy interest charges which have been paid into Threadneedle Street.

When the United States is short of money the Secretary of the Treasury issues a loan through the agency of a syndicate of Wall Street bankers, which at once advances the required sum. The syndicate, through its agents at home and abroad, immediately receives subscriptions from various life-insurance and

mercantile companies, or from private purses, and the loan is soon allotted. The syndicate realizes a handsome profit for its part in the transaction. Its work, though easily performed, because of our high credit, assures the integral and instant placing of the loan. Governments sometimes sell bonds in large blocks to the national bourses or to national banks, whose operations they direct.

The latter is the French manner of floating government loans. International values are admittedly very uncertain quantities, but they are widely speculated in. Their great convenience lies in the fact that they serve as cash. France paid the greater portion of her 1871 debt at Berlin with international values. Her currency was little effected at the time because gold and silver did not leave the country. England's imports exceed her exports by many millions, largely because of the amount of foreign coupons she holds. French *rentes* are sold for a few francs, and therefore go into the hands of the poor, who are the real millionaires of that country. In the United States, the common people rarely buy government bonds because, with the exception of war issues, they are of large denominations.

One drawback about loans is that they facilitate wars. One of their virtues is that in periods of danger they often save a nation, when taxes would not be effective because of the time required for their collection. Large sums can never be raised by taxes. England is very sensible in that she, in time of war, borrows about 60 per cent., and simultaneously raises the rest of the amount required by taxes. She paid two-thirds of her Crimean War expenses by means of loans.

Since 1850 France has paid for all her wars by the sale of special bonds. It would have been quite a simple matter to have raised one-third of the necessary amount by means of taxes. England never borrows for her public works, as does France, but the British colonies frequently do. Other European countries than England cannot afford to emit public-works loans. England's debt is now less by one billion dollars than at the peace of 1815, when she was recovering from the Napoleonic wars, which cost her $4,067,232,245. The cost of the Boer War she will get back from the South African mines.

During our Spanish War we issued two loans, which aggregated $500,000,000. At the same time new taxes were established, following the English precedent of combining the two systems. Our loans ran from ten to twenty years, which showed we were faithful to our own precedent. In many European countries it is customary to make short-term government loans perpetual, but the continent is gradually adopting our system of squaring up in two decades.

If you lend money to individuals you generally get it back with interest. It is different with States. The sum reimbursed by a government is usually much greater than the amount loaned. Often special privileges are offered in the way of annuities. Only a few countries borrow at par without putting a premium on payment. France has 6, 5, and 3 per cent. bonds. The 3 per cents are much more popular than the 6's. The lowest interest rates correspond to the highest premiums at the payment of the loan. Pitt invented the scheme of issuing 3 per cent. bonds below par—that is, for every £100 taken the subscriber received £180 or £190 in 3 per cent. bonds. In a crisis a State cannot always get large sums at the legal rate of interest (for some countries do have a legal rate, bad as that system is). Thus a State offends its own law in a roundabout way. This scheme has helped States, but it often leads to extravagance.

Our plan of short-term annuities is a very good one. We have no big bills to pay all at once. We have converted most of our old 6 per cents. to 3 and 2 per cents. France teases its bankers by offering large premiums, in the hope of getting low interest rates. These premiums are often paid in Europe by means of lotteries, which is a comparatively inoffensive way of encouraging the common people to save their money.

A uniform public debt is quite impossible. It is better not to consolidate long and short-term loans. A State gains by keeping them separate, because they are easier to convert in those forms. France lost several hundred million francs by making her 1871 and 1872 loans payable at the same date, and by running them together on the bourse. We have never been guilty of this error. Some States lend to great industrial or improvement corporations to develop countries or enterprises which will eventually be of national benefit. Thus France materially aided a railroad company in Algeria. A State generally loses in the end by acting as intermediary too often, and should therefore loan in the open market whenever possible.

National floating debts in Europe are very heavy. There one nearly always encounters an excess of expenses over receipts in each year's budgets. Continental States are compelled to pay 25 per cent. interest on short-term loans to offset these floating debts. England's floating indebtedness was at one time twice as great as her consolidated debt, but has been relatively insignificant since 1877. It consists of exchequer bonds, part of which were issued by Disraeli for the purchase of the Suez Canal; short-term exchequer bills, and treasury bonds, which are reimbursed every few months. Before the South African War her total floating debt was about $40,000,000,

or one-fifth of the floating debt of France in the same year. Terminal annuities form no part of England's floating debt. The reason the French floating debt is so large is because that government has made large subventions to schools, railroads, and public works.

Spain showed her weakness by carrying her floating debt from 1890 to 1898. In 1894 the government owed the Bank of Spain 770,000,000 francs. She should have converted this sum to one great loan at 4 per cent. When surprised by the American war she was without funds. France owes about $6,200,000,000 to-day, nearly all of which has been contracted since Napoleon's wisdom was lost to her. Under the *Restauration* she borrowed heavily at 7 and 8 per cent., which was unwise. Since 1840 her annual deficits have been constant, made up usually by increasing her floating debt. Under Napoleon III. prodigious success in public subscriptions made incessant loans possible. Yet her credit was so good in 1871, after her thrashing from Germany, that she astounded the world by paying off $1,960,000,000 in three years. In spite of the fact that she has a larger debt than any other country, it is not at all necessary that she pay it now, or even diminish it to any great extent. She makes an occult payment in settling her terminal annuities, many of which have been a veritable debt. Her railroads will soon repay her moneys she advanced for their construction. Holders of her *rentes* are not altogether satisfied with giving them up, for they make an excellent security.

The United States, England, Holland, Denmark, Belgium, and Prussia have all diminished their debts. The United States has been too ambitious in this respect. In fifty years we shall have a population of over 200,000,000, and six times our present richness. Consequently, it would have been more astute to have made the future bear some of the burdens of the Civil War. A small annual payment only should have been made on the debt. A much greater proportion of our wealth could have been employed to better advantage in the reduction of vexatious taxes, which hindered industry, and by the retirement of paper money. We could have waited longer than any nation in the world to pay our debt. Instead of that we reduced it from $3,000,000,000 in 1865 to $585,000,000 in 1892.

From 1878 to 1887 we reduced it $600,000,000, a very remarkable performance, which was too great a sacrifice, considering the relative importance of the end achieved. United States bonds were made scarce by Treasury purchases, which crippled national banks in 1891. Our conversions from 6, 5, 4, 3½, 3, to 2 per cents were extremely creditable. If we are careful

we can put all our debts on a 2 per cent. basis. Our debt now is comparatively light, although it is increasing with some speed. The Treasury obliges the national banks to buy Government bonds, which guarantees their existence. Our credit, which was long affected by repudiation of State debts in the first half of the last century, is now of the highest character. Since 1892 our finances have been unskillfully managed. There have been enormous deficits and wastes. In 1896 our debt was $847,000,000; in 1892, $92,585,000. It promises to grow tremendously since we have accepted cross-sea colonies. It will be interesting to note if our financial education is sound enough to keep us from getting into the plight of some of the European nations. Our resources are so illimitable we have grown careless, and may become more so.

When a country like Egypt becomes bankrupt several leading Powers, which have large property interests endangered thereby, form an alliance and reorganize its finances. When Egypt's Khedive squandered her wealth, Goshen and Rivers Wilson, of England, set her on her feet again. Assisted by a few ugly guns she marched into the land and made stable what her financiers had commenced. The Rothschilds, of London, did the same thing for Brazil and the Argentine Republic, both of which failed because their paper money depreciated 80 per cent. The Rothschilds paid no interest on these bonds, but instead instituted a funding loan which carried 6 per cent. The paper money was pretty thoroughly retired. This was possible because the Rothschilds, at the origin of those States, floated their bonds, which made the example an exceptional one.

The reason Portugal was so friendly with England last year at Delagoa Bay was because she realized her credit was poor and that she could borrow only from her ally. In 1893 Greece arbitrarily reduced her debt to 3 per cent. Her finances were comparatively prosperous until her silly war with Turkey. The reason Germany showed her anger against Greece at that time was partly owing to the fact that German holders of her bonds were hard hit by the reduction to a 3 per cent. basis. After the war the Powers refused to let her handle her own finances which, *per se*, was no disgrace to her. It is quite possible that the capitalists who suffered will recover at least two-thirds of their losses.

The debts of Australia and Germany are only apparent, because they are more than compensated by the richness of the national domains. Germany owns her own railroads, forests, and salt mines, and derives a large income from them. She is the only civilized country with no real debt to speak of, for her own property much more than covers her obligations. It is a

question whether or not it is best for a country to have practically no debt.

New Zealand's debt has tripled in the last few years. There the great enterprises are under the direction and control of the State, which, when placed upon paying bases, will make New Zealand quite as independent as Germany.

The following statistics show the comparative debts and debt charges of a number of countries:

Country.	*Population.*	*Debt.*	*Debt Charge.*
France	38,517,975	£1,197,933,250	£49,911,410
Russia (European)	106,154,607	788,483,750	27,351 400
United Kingdom	40,559,900	635,040,960	23,000,000
Italy	31,856,675	490,837,740	23,246,240
United States	70,000,000	408,345,100	8,178,870
Spain	17,565,700	358,133,600	15,880,350
Germany	52,279,900	115,112,340	3,780,665

Government Bonds, Variations of Value of.—U. S. Consul Haynes, Rouen, France, translates an interesting article written by an eminent financial economist, Alfred Neymarck, in which that writer throws a new and interesting light upon the causes that make the market credit of governments.

M. Neymarck begins by refuting the common theory that "debt per capita" is the basis of government credit. On this point he says:

"The Republic of Liberia possesses the smallest debt, both total and per capita, of any country in the world. It owes about $482,500; its budget is more than this; its receipts exceed its expenses by $6,000, and it has a population of 1,500,000, the per capita debt being thus some thirty-one or thirty-two cents, while in England, Germany and France the debt is many hundred times greater. Who would pretend, however, to assert that the Republic of Liberia is in a better situation than England, Germany or France? Certainly, no one."

The writer, after detailed analysis of the principles of investment in England, France and Germany, reaches these conclusions as to the causes that make prices of government securities:

"These causes are not found in the debt per capita, nor in the amount of borrowings, nor in the number of population, etc., as is generally asserted, but are of a financial kind, depending upon—

"First, the financial, commercial and industrial productivity of the country.

"Second, the ease with which fiscal charges are supported and acquitted.

"Third, the financial organization of the market, the kind of investors and the economy of the different countries.

"Fourth, the unity or diversity of national securities.

"Fifth, the method of employing capital in State or other stocks and the extent of the market and negotiations.

"Sixth, the inclination of investors to acquire stock or other securities."

Some phases of the argument are presented in the following excerpts:

"In England there is little speculation in Consolidated 2.5 per cents, and consequently few floating shares. This is because England, except in late years—during and following the Transvaal war—has borrowed little as Consolidated stock. Speculation, the incontestible effect of which is to support those securities imperfectly classed, has seldom needed to intervene. English consols are carried especially by the banks, societies, insurance companies, or wealthy capitalists, who thus employ them exactly as if they were bank bills carrying interest, payable at sight, and in addition offering chances of increased value. The English have always believed that an investment in consols was exempt from risks, presenting the maximum of security with an almost certain increase of value. The uninterrupted advance of English consols during nearly half a century, with rare exceptions, justified this belief, but of late the competition of other investments, the conversion of the stock, and especially the Transvaal war, have shown that it is not best to have a preconceived and positive opinion concerning state and personal securities.

"In 1894 the old 2.5 consols were negotiated at 102 per cent., being 14 per cent. higher than the new 2.5 consols. Eight to 10 points of this lowering of 14 points since 1894 is due to the Transvaal war; and during the last year the reduction in value has been more pronounced.

"What is this proof of? It is that the principal maintenance of government securities and their force of resistance are particularly due to the kind and number of buyers—that is, from a point of view of the values and classification of stock in the portfolios, a large number of buyers and owners of the middle class, scattered all over the country, as in France, is preferable to large temporary holders. It is true that in addition to the wealthy investors, as banks and societies, there are many permanent English investments, such as dowries, or those administered by guardians or trustees which cannot be employed in industrial or personal enterprises.

"In France the public coffers, speculators and capitalists invest in rentes, which are bought or sold on time or cash in the official or free market, more easily sometimes than the same amount of national or international speculative values. The

French rentes have one of the largest markets, cash or time, existing. The buying or selling of hundreds of thousands of rentes can be done in one bourse with a wonderful facility and without producing any extended change in the market. The buyer is sure to find a seller and the seller a buyer.

"A less number of temporary investments are made in French than in English securities, for the particular reason that the French rentes appear more speculative, and as such are exposed to a greater number of and more sudden movements. A French capitalist having funds disposable for two or three months will buy 'bons' of the Treasury to mature, in two or three months, will discount some commercial stock, or will deposit the funds in an establishment of French credit, and be content with a trifling interest.

"French rentes are sustained by millions of those depositing small sums in the savings banks—minors, the disabled, married women, insurance societies, mutualists, and the millions of middle classes, countrymen, shopkeepers, and merchants disposing of some hundreds or thousands of francs, all of them, in preference to anything else, investing in the security and tranquility of French 3 per cents. No country in the world possesses such a financial democracy. This democracy, which imprudent legislators too often alarm, has the respect and gratitude of everyone. It has furnished the necessary capital for the war ransom, for the recuperation of the country, and for improvements in time of peace. Freedom of territory and the safety and restoration of the country is found in the legendary 'woolen stocking.'

"In Germany there is little speculation in state securities. When German or Prussian loans are effected the banks, at the moment of emission, intervene to facilitate the sale and classification, after which they do nothing more. In Germany, contrary to the conditions in England and France, there are no obligatory investments in stock, such as dowries or deposits of guardians. German savings-banks are not compelled, as in France, to invest in state securities.

"Germany has not a great number of small capitalists investing their savings in rentes. If it existed its strength would be greatly diminished by the diversity of stocks amidst which German investors would have to choose. It is not probable that a Saxon or a Bavarian buys Prussian 3 per cents or the 3 per cents of Wurttemberg in preference to the Saxon or Bavarian 3's. On the contrary, an Englishman or Frenchman would buy 2.5 consols or 3 per cents perpetual, whatever might be the county, village, or department in which he lived."

In support of his theory M. Neymarck cites other countries. His conclusions are summarized in the following table:

Country.	*Population.*	*Debt.*	*Interest on Debt.*
Belgium	6,700,000	$555,800,000	$21,000,000
Netherlands	5,300,000	459,000,000	12,700,000
Sweden	5,200,000	93,000,000	3,500,000
Denmark	2,400,000	66,000,000	2,000,000
Norway	2,200,000	70,000,000	2,700,000
Switzerland	3,300,000	*89,000,000	772,000

Country.	*Debt per Capita.*	*Stock Quotations.*	*Expenses.*
Belgium	$81.00	$99.5	$98,400,000
Netherlands	86.85	96	71,400,000
Sweden	17.75	94	46,500,000
Denmark	20.25	89	20,200,000
Norway	27.20	89	27,200,000
Switzerland	59.80	90	20,200,000

*Including debts contracted for guarantee of railways.

"These figures justify the financial rules and principles already established for Great Britain, France and Germany. If the debt per capita were an exact criterion the Swedish funds should be worth more than all the others, after which would follow the Danish, Norwegian, Swiss, Belgian and Dutch, German, English, French. On the contrary, the English, Belgian and French securities are more valuable, after which come the Dutch, Swedish and Swiss, with Danish and Norwegian securities at the bottom."

Government Bonds, Theory of Credit Basis of.— M. Neymarck, the French economist's, theory of credit basis is that the credit of government securities depends upon the following factors:

(1) To be master of the market of its own securities.

(2) To contract no foreign loans, unless absolutely necessary; to give preference to interior loans.

(3) To have for its public securities home buyers, automatically, by their purchases, upholding the credit of the country in which they have placed their confidence.

(4) To keep account of the productivity of other nations.

(5) To keep account of the amount of their economy.

(6) To see that the public funds are well administered.

In his current discussion, the author takes up the securities of Italy, Austria-Hungary, Russia, Roumania, Spain, Portugal, Bulgaria, Servia, Greece, and Turkey. The figures for these countries are tabulated as follows:

Country.	*Population.*	*Debt.*	*Interest on Debt.*
Italy	32,900,000	$2,895,000,000	$114,200,000
Austria	26,000,000	1,737,000,000	71,400,000
Hungary	19,000,000		
Russia	115,000,000	3,396,800,000	55,900,000
Roumania	6,200,000	270,200,000	16,400,000
Spain	18,200,000	1,864,400,000	76,200,000
Portugal	5,400,000	824,500,000	22,600,000
Bulgaria	3,700,000	54,000,000	4,800,000
Servia	2,500,000	79,500,000	3,500,000
Greece	2,400,000	159,200,000	3,900,000
Turkey in Europe	24,000,000	603,100,000	11,000,000

	Expenses.	*Debt per Capita.*	*Stock Quotations.*
Italy	$350,600,000	$88.39	104
Austria-Hungary	333,100,000	38.60	100 to 102
Russia	1,156,200,000	30.00	92 to 94
Roumania	42,000,000	43.40	88 to 90
Spain	187,600,000	103.00	*89
Portugal	62,100,000	152.60	†63
Bulgaria	19,300,000	14.50	‡91
Servia	14,500,000	31.65	*77
Greece	13,500,000	66.00	*240
Turkey	85,900,000	25.00	*86.50

[*4% bonds. †3% bonds. ‡5% bonds.]

In summarizing the figures contained in this study, the author classifies the countries as follows:

According to Debt per Capita.	*According to Interest Yielded by Securities at Market Value.*
Bulgaria.	England.
Germany.	France.
Sweden.	Belgium.
Turkey.	Germany.
Denmark	Netherlands.
Russia.	Sweden.
Servia.	Denmark.
Norway.	Norway.
Austria-Hungary.	Switzerland.
Roumania.	Italy.
Switzerland.	Russia.
Greece.	Roumania.
Belgium.	Spain.
Netherlands.	Turkey.
England.	Portugal.
Italy.	Servia.
Spain	Bulgaria
Portugal.	Greece.
France.	

In regard to this classification, he says: "The juxtaposition shows this singularity: Bulgaria has the least 'per capita' debt and France the greatest, after which come Portugal, Spain, Italy, England, Netherlands, Belgium, etc. If the 'per capita' argument were of any value, French, English, and Bulgarian

securities should be quoted the lowest, while those of Servia, Turkey, and Roumania would be the highest. This shows how ridiculous is the 'per capita' argument. It is a legend which the adversaries of our credit should renounce."

In concluding his study, the author pays a glowing tribute to the financial strength of his own country, from which we quote the following paragraph:

"Since the war the annual savings of France have increased year by year; they have firmly supported the weight of the budget, which—$386,000,000 before the war—passed to $694,800,000 in 1905, exclusive of the expenses of the communes and departments. The credit of the State rests upon the honesty, loyalty, and fidelity of the country, and of the government itself to fulfill its engagements, and in this respect the nation is inferior to none. The French '*rente*' is, as we have often said, the signature of France, and no one among us, whatever his political faith, will ever allow it to be protested. Our country owes only itself. It has transferred none of its resources, none of its property, railroads, tobacco, or forests, etc.; it has pawned none of its belongings. From the point of view of capital, it is the debtor of no foreign country. It has supplied funds to the whole world. All borrowing countries turn toward its financial market and its annually increasing savings. According to the appropriate expression of the Governor of the Bank of France, in his annual report for 1902, 'France is the banker of the world.'"

Government Bonds, United States.—*Coupon bonds.*—United States Government bonds are issued in two forms: (1) coupon and (2) registered. Coupon bonds are usually preferred by individual investors and those who buy to hold for short periods. In buying coupon bonds, it is essential that the buyer should command facilities for the safe preservation of his bonds. Coupon bonds are payable to bearer, and on sale pass by delivery without endorsement. Should coupon bonds be lost, the Government does not undertake to protect the actual holder. The bearer of the bonds only is recognized. Registered bonds are in demand and preferred by buyers who intend to hold them indefinitely and for long periods. Coupon bonds can at any time be converted into registered bonds of the same loan issue, at the Treasury Department. The law does not authorize the conversion of registered into coupon bonds. Exchanges of this kind can be effected in the open market, by the payment of a slight premium. The person transmitting coupon bonds to be converted into registered bonds, must pay the express charges; but there are no other charges.

Registered bonds.—In the three following respects registered bonds are distinguished from coupon bonds: (1) they have inscribed or expressed upon their face the names of the persons who own them, designated payees; (2) they are payable only to such payees or their assigns; and (3) the property or ownership therein can be transferred only by assignment. For the purpose of assignment forms are printed on the backs of the bonds, together with directions to be followed in the execution of assignments. In the Treasury Department a ledger account is opened with each holder of one or more registered bonds, and this bond or lot of bonds is described therein. All transfers that are recognized by the Government must be made upon the loan books in the office of the Register of the Treasury. Should registered bonds be lost or stolen, payment thereon may be stopped by notifying the Treasury Department.

Assignment of bonds.—The formal directions printed on the backs of the bonds should be carefully followed when assignments are executed. The name of the assignee should be written plainly in the space designated for that purpose, and assignments should be dated and properly acknowledged. Should it be your intention to divide a single bond among two persons or more, their names and the amount to each should be specified in the assignment. Should it be your intention to assign only a part of a bond, a new issue for the remainder will be made to you: *Provided, however*, that the amount assigned shall correspond with one or more of the denominations in which the bonds are issued.

Assignment in blank.—Registered bonds are often assigned in blank, but when this is done, the owner should remember that such assignment makes them payable to bearer and renders them available to any holder. Put in another way, an assignment in blank means that the title to the bonds passes by delivery. Do not resort to a detached assignment unless the blank form of assignment printed on the bond shall have been already used; and then only when there is not sufficient space on the back of the bond for a second assignment.

Method of assigning.—The payee, or owner of the bond, should sign his name to the assignment as the name is written on the face of the bond. Should the bond be issued to a firm, the assignment must be subscribed in the name of the firm by a member who has authority to sign for the firm. The officer witnessing this signature must be satisfied with the authority offered. If the bond is issued to joint owners, co-trustees, executors, administrators, or guardians, each person must sign for himself.

Assignment by a corporation.—If to a corporation or company,

the official character of the person signing the assignment, and his authority to dispose of such bond must be verified by vote or resolution of the board of directors of the corporation or company, certified under its seal. Also, when such person is authorized, by virtue of his official position, to execute the assignment, a certificate, under seal, of this fact, and of his election to the office, and testifying that he still holds such office, must be furnished, together with a certified copy of the charter or by-laws of such corporation or company, showing the authority claimed thereunder. All evidence of authority is placed on file in the Treasury Department, and, when of a general and permanent nature, its reproduction in succeeding transactions is not necessary, provided, however, the facts are referred to. An assignment by mark (X) must be witnessed by at least one person in addition to the officer verifying the assignment.

Assignment by a married woman.—A bond issued in the maiden name of a woman who marries should be so assigned that the maiden name and married name will both appear on the assignment. Illustration: "Mary Smith, now by marriage Mary Brown." Bonds when assigned to a married woman should be to "Mrs. Mary Smith," not "Mrs. John Smith."

Assignment by a minor.—Minors cannot assign registered bonds; their bonds must be assigned by a guardian or trustee authorized by the court.

Assignment by representatives and successors.—When a bond owner dies, the representative of the deceased person must furnish legal evidence of the decease and of the representative's power to act. An executor or administrator can assign bonds standing in the name of the deceased person in whose place such executor or administrator shall be acting. When there are two or more legal representatives, all must unite in the assignment, unless one is legally by court decree or testamentary provision designed as having power to dispose of the bonds.

Bonds in the name of trustee.—In the event of the death of a fiduciary, or trustee bonds in his name cannot be assigned by his executors, but must be assigned by a successor regularly appointed by a court having jurisdiction. An executor, administrator, trustee, guardian or attorney cannot assign bonds to himself, unless he is authorized to do so by a court possessing jurisdiction.

Foreign successorship assignments.—When a bond owner at the time of death was a resident of a foreign country, the person claiming to direct the transfer must furnish an exemplified copy of the will or other instrument, duly certified under the hand and seal of the proper officer, attested by the certificate

of the United States minister, chargé, consul, vice-consul, or commercial agent, or if there be none such accessible (which fact must be certified), by that of a notary public, to the effect that such copy is executed and granted by the proper tribunal or officer, and is in due form and according to the laws of the country.

Assignments by attorney.—Persons entitled to assign bonds may appoint for that purpose an attorney, who by virtue of conferred authority can execute the assignment in the same manner as provided for the constituent, and can appoint one or more substitutes for that purpose; but an attorney or substitute must not assign the bonds to himself individually. No officer of the Treasury of the United States should be selected as such attorney. Powers of attorney authorizing the assignment of bonds should be sent filed record with the Register of the Treasury. When acknowledgments of assignments are not made at the Treasury Department, they must be made before an assistant treasurer of the United States, a United States judge or district attorney, a clerk of a United States court, collector of customs or internal revenue, or president or cashier of a national bank. The witnessing officer is required to append his official title, and if he has one, affix his seal of office; should he have no seal of office, he must certify such to be the fact. The president or cashier of a national bank must append the title and affix the seal of the bank. The impress of the seal must be made upon the bond.

Execution of powers.—Power of attorney for the transfer of bonds must be acknowledged in the presence of an officer authorized to take acknowledgments of assignments; where such office has a seal, it must be affixed; if he has none, he should state the fact. Power of substitution must be executed and acknowledged in the same manner as power of attorney.

Transmission of bonds.—When a registered bond is properly assigned, it should be transmitted to the Register of the Treasury for reissue, and it should be accompanied by an explicit letter of instructions, stating the amount enclosed, the loan represented by the bond, the denomination of the bond desired in exchange, and the mail address to which interest checks shall be forwarded. If bonds of different loans are forwarded in one remittance, a separate letter of instructions should accompany the bond or bonds of each loan. If coupon and registered bonds are transmitted at the same time, the coupon bonds should be sent to the Secretary of the Treasury and the registered bonds to the Register of the Treasury.

New bonds.—Registered bonds received for transfer are canceled, and new bonds in their place are issued in the name of

the assignee. They bear interest from the first day of the quarter in which the transfer is made. Generally returns are made on the same day that the bonds are received, and made by registered mail, unless instructed to forward by express or otherwise.

Interest.—Payment of interest on registered bonds is made by check drawn at the Treasury Department in favor of the registered holder. These checks are mailed to the post-office address of the owner, if it is known; if not known, they are held by the Treasurer of the United States until called for. The checks are paid, when properly endorsed, on presentation at the United States Treasury, or at the office of any assistant treasurer of the United States. Stamped endorsements are not recognized. It is advisable that holders of bonds should notify the Register of the Treasury of any change in their post-office address, at least fifteen days before the interest falls due; and in case of the appointment of an attorney to endorse the interest checks, the Register should also be notified of the fact. The holder should also transmit to the Auditor of the Treasury Department all powers of attorney authorizing the endorsement of interest checks and to advise him, in detail, at which of the offices referred to above it is desired that the interest checks under such powers shall be paid.

Closing of transfer books.—Transfer books are closed during the month immediately preceding the date of payment of the interest, with the exception of the 4 per cent. loan of 1925. The books of this loan close against transfers of bonds on the fifteenth day of the month preceding the date of payment of the interest. If bonds forwarded for transfer are not received prior to or upon the day fixed for closing the transfer books, the transfer will not be made until the books are reopened; and, furthermore, the interest for that quarter will be declared in favor of the parties whose names appear upon the face of the old bond, and to them the assignees must look for any interest claimed.

Called bonds.—United States called bonds forwarded for redemption should be directed to the Secretary of the Treasury, Division of Loans and Currency. When registered bonds are so forwarded, they should be assigned to the "Secretary of the Treasury for Redemption." Assignments must be dated and properly acknowledged as prescribed in the note printed on the back of each bond. When checks in payment of registered bonds are desired in favor of a person other than the payee, the bonds should be assigned to the "Secretary of the Treasury for redemption for account of" (insert here name of person or persons to whose order the checks should be made payable).

Bond quotations.—Government bonds are quoted daily on the New York Stock Exchange, and these quotations are printed in the daily papers, but it is estimated that 90 per cent. of the trade in these securities takes place in the offices of dealers and banks. Prices outside the Exchange, therefore, are usually closer to the market than the printed quotations of bid and asked on the Exchange.

Obsolete Confederate Bonds.—A conservative Southern daily newspaper says: "Periodically some unsophisticated Englishman rises to remark that it is high time the Government of the United States should take steps to bring about the payment of the bonds of the Southern Confederacy. A correspondent of the London *Financial News* directs attention to the highly interesting fact that 'within one hundred yards of the Mansion House' in the British metropolis are deposited over $200,000,000 of these bonds. He eagerly observes that the Southern States are prevented from paying them by Act of Congress; that the anger which prompted the destruction of the cotton deposited as security for these bonds, and the passage of an act rendering reparation to the bondholders illegal, should have been appeased by this time. Therefore it is suggested that the United States should now permit the South 'to do what it can toward an amicable settlement of the debt.' These, it should be remembered, are not the repudiated bonds of the Reconstruction period, but old Confederate bonds, which the South would surely have redeemed had the fortunes of war been on the side of Dixie. There is not the remotest possibility that they will ever have any value except to curiosity hunters. Since the war there has been some speculation in these securities; but, as our London contemporary, the *Financial News*, says: 'A person who bought chances for a repayment of these bonds at a cent per dollar would be guilty of a rash, hazardous speculation within the meaning of the act forbidding the taking of such chances.' The Confederate bond was born in honor; the Reconstruction bond was born in dishonor. Neither is worth the paper on which it was printed as an investment; but there will, perhaps, always be unsophisticated persons to believe that one day both will be quoted on the London and New York Stock Exchanges."

State Bonds, Status of Repudiated.—There is pending (1904) in the United States Supreme Court at Washington a judgment in a suit so interesting in itself, so picturesque in its historic background, so vital in its bearing upon some hundreds of millions of dollars' worth of State bonds now regarded as practically

worthless, that it merits careful examination. The judgment is for $27,400; it is in favor of the State of South Dakota and against the State of North Carolina. The decree is that North Carolina must pay this amount, together with costs of suit, "on or before the first Monday of January, 1905"; and it is provided that, if North Carolina does not pay, certain property belonging to that State shall be seized, advertised, and sold at public auction, "such sale to be made at the east front door of the Capitol-building in Washington."

AN INDIVIDUAL CANNOT COLLECT.

If an individual has a claim against a State, he is utterly without redress so far as the court is concerned; but, if one State has a claim against another State, it can bring suit in the United States Court. This state of the law makes it possible for any commonwealth to evade its debts whenever it is so minded, leaving the creditor without redress. At various times eleven of the Southern States, North Carolina among the number, have taken advantage of this situation to repudiate their bonded debts to the extent of some hundreds of millions of dollars.

AMOUNT OF REPUDIATED BONDS.

It is not possible to state accurately just how many millions there are of these unpaid bonds outstanding. When the States repudiated them, they ceased to carry them on their books. Twenty years ago, the amount charged against each State was estimated as follows:

State	Amount
Alabama	$38,812,000
Arkansas	20,807,000
Florida	5,280,000
Georgia	13,580,000
Louisiana	32,115,000
Mississippi	22,600,000
North Carolina	48,350,000
South Carolina	19,500,000
Tennessee	29,850,000
Total	$230,894,000

Since then, the twenty years' accumulation of interest would have doubled the sum total.

HELD BY SCORES OF SMALL INVESTORS.

These repudiated bonds were held, and are still held, by scores of small investors throughout the Northern States and in Eng-

land. They lie, with their big sheets of uncut coupons, in the dusty pigeon-holes of desks. Occasionally, in settling up an estate, they come to light and are put upon the market. They command just about such a price as they are worth as historical curiosities. You can buy a gorgeously engraved and highly colored bond of the State of Louisiana, stamped with the State's seal and signed by the State officials, bearing the State's formal promise to pay $1,000, and interest which would now amount to over a thousand dollars more—you can buy this, or the bond of any of these repudiating States, for from five to fifteen dollars. It is ten of such bonds that figure in the present suit between South Dakota and North Carolina.

EFFECT OF THE DECISION.

The plain effect of that judgment, the law relating to repudiated bonds as it stands to-day, is this: Whenever, by any sort of transfer which, so far as the records show, is *bona fide*, any State finds itself the owner of repudiated bonds whose conditions are sufficiently analogous, in a legal sense, to the bonds in the present suit, that State can sue the repudiating State in the Supreme Court, and recover judgment. The perversion of public policy, the gross abuses, which may readily arise from this state of the law, can best be understood by a close examination of the statute by which South Dakota acquired the bonds in the present suit.

POSSIBILITIES OF ABUSE.

For this purpose, it will be sufficient to quote five lines of the statute to which Mr. Justice White called emphatic attention in his strong dissenting opinion, in which he opposed permitting South Dakota to recover, italicizing the words which he italicized:

"The Attorney-General is authorized to employ counsel to be associated with him, in such suits or actions, who, with him, shall fully represent the State, and shall be entitled to reasonable compensation *out of the recoveries and collections in such suits and actions.*"

Now, what is the magic of these italicized words, which, alone, Justice White declares, make the suit one which the court ought to refuse to lend its aid to. Their significance can best be illustrated by a supposititious case.

A SUPPOSITITIOUS CASE.

Suppose I buy ten thousand, or a hundred thousand, dollars of the bonds—unless this present decision has raised their price—for 1 per cent. of their face value. Suppose I go to the proper official of South Dakota and say: "I am going to give you these bonds. I see by your statute that you are authorized to employ a lawyer to collect them. Now, I know a lawyer, A. He is my personal counsel. He is perfectly familiar with all the legal conditions of these bonds, and is altogether the best man you can employ to collect them." It is only reasonable to suppose that the recipient of so bounteous a gift would be amiable enough to employ my friend A. And, without a doubt, as fees for lawyers go in the world of high finance, what the statute calls "a reasonable compensation" for the services of my friend, A., would be at least 30 per cent. of the face value of the bonds. And when A. has got his handsome fee, might not some generous impulse actuate him to come to me and thank me for having put him in the way of picking so rich a plum? Might he not even give me half the fee he got? The net result, then, would be this: I should have paid 1 per cent. for the bonds, and received 15 per cent.; my friend A. would have 15 per cent., and South Dakota would have 70 per cent. Decidedly, there would be a general sense of peace and satisfaction in every quarter, except North Carolina.

Now, under the plain wording of this statute, and under the decision in the present case, every one of these things could happen to-morrow. The feeblest imagination can picture the avenues of financial and political corruption which this opens up.

ANOTHER POSSIBILITY.

Still another possibility follows this decision. Suppose that South Dakota had bought these bonds, instead of receiving them as a gift. The decision hangs entirely on the fact that South Dakota was the *bona fide* owner of the bonds. There is no magic in the fact that she got them as a gift; she would be equally the *bona fide* owner if she had bought them. This decision opens up endless opportunities for speculatively minded States to trade in the obligations of sister States. Can any imagination exaggerate the scandals, the corruption of Legislatures and State officials, the limitless possibilities of graft which would follow, if States should start to trade on the power which this decision gives them?

THE BONDS OUGHT TO BE PAID.

It may be inferred, from what has been said, says Mark Sullivan, that I do not think these bonds ought to be collected at all. This is far from the truth. What is to be protested against, and what the dissenting justices disapprove, is this beating the Constitution about the stump and sacrificing the dignity of sovereign States, to serve sordid ends. The Southern States ought to pay every cent of these repudiated bonds. It is possible that, in due time, these States will see this matter in the same light. But the day when they shall see it, and pay their repudiated obligations of their own free will, will not be hastened by making them the victims of legal jugglery with the Constitution.

Note.—Up to 1907 the court and South Dakota had found no way to enforce the judgment. In effect the court holds that in such a case the debtor State can get all the judgments and all the decisions it asks for; but a sovereign debtor, whether it be North Carolina or the United States, cannot be made to pay against its will, under the law. It may be compelled by war; but in case of war, such is a qualification of a State's sovereignty, the United States must defend it; while such is another qualification, the Constitution forbids one State—South Dakota, for example—to make war on another State, or, indeed, to make war at all.

PART II

Municipal Bonds

Advantages of Municipal Bonds as Investments.—The savings-banks and other institutions paying interest on deposits were complaining only a short time since of the difficulty they encountered in securing returns on their investments so as to be able to pay depositors over 3 per cent. The returns on Government bonds and other high-class securities had been so reduced that the savings-banks had great difficulty in keeping up their usual income. There were many speculations made as to the reduction of the interest rate. and as to what might be the lowest limit if the reductions should continue. There has, however, been a change, and the savings-banks are finding themselves able to return to a 4 per cent. rate on deposits. This may show that with less demand for securities the prices fall,

and the amount realized in interest is greater; but there is no doubt that the great increase in municipal securities issued by counties, cities and towns for purposes of improvement has had its effect in strengthening the general and steady demand for money upon which the average rate of interest must depend. The lessening demand for Government securities, which although gilt-edged as to credit, bear a low interest rate, and the higher interest rates which Japan and Russia had to pay for recent loans, show that the public have learned that it is possible to obtain investments sufficiently secure which afford an income much better than Government bonds.

No doubt there is much choice among municipal securities, and they range from the bonds of great cities to those of comparatively small towns. When a number of municipalities of various kinds in the United States is taken into account, the possible extent to which this form of investment may mount up shows such an unlimited demand for capital for many years to come that may well inspire confidence as to the continued strength of the average interest rate.

The advantage of municipal securities considered as a whole consists in their being so well distributed as to the basis on which they rest. A nation as a whole may meet with difficulties arising from war, or other calamity, and its bonds may become less secure in consequence, or it may become so high in credit that its securities are in such demand as to bring little profit to the ordinary investor, making them desirable only to the class of capitalists who use them as a temporary investment where their money will be secure, in the intervals when it is not employed in enterprises bearing larger returns. The investor who looks to income solely, who desires freedom from anxiety and a steady interest rate, does not care to hold Government bonds which, especially in the United States, are so competed for, for special purposes, that the realized rate, if the bonds are held purely for the interest paid, is at all times almost nominal.

Municipal bonds give a wide choice in the rate of interest. The investor for income can take almost any degree of risk he wishes to, and can obtain the largest possible income from a given capital by a wise selection of municipal bonds. It must be remembered that the municipalities of the United States are most of them well established and prosperous, and almost sure to become richer and more prosperous with the growth of the country as a whole. The investor by purchasing the securities of a county or town just struggling into prominence, may obtain an interest rate which gives a good income, and in most cases he is also sure to obtain an increment in his principal by

reason of the improvement in the credit of that particular municipality.

To investors for income on a large scale, such as savings-banks and trust companies, municipal securities offer many advantages. The risks that can be taken can be averaged. But since the methods of issuing these securities have been scrutinized from a legal standpoint, and the proportion of issues any municipality shall bear to its population and wealth carefully fixed by State law, and provisions made for the sanctioning of such issues by the vote of the inhabitants, there is in fact very little risk taken. The only contingency that might cause a fall in value of municipal securities, is a general and permanent decline in the prosperity of the whole country.

This legitimate opening for the investment of the surplus wealth of the country is likely to continue available for some time to come. If the doctrine of municipal ownership of many of the public enterprises now furnished by private enterprise should make progress, there would seem to be hardly any limit to which the safe issue of municipal securities might not extend. Very often a higher rate of interest indicates a greater risk, but the fact that municipal securities pay a higher rate than other first-class securities does not seem to be due to this cause. It is the competition for money caused by the free borrowing of municipalities that makes the rate of interest on their securities more profitable to the investor; a plain instance of the working of the law of supply and demand. As railroad securities formed the chief form of investment during the last half of the nineteenth century in the United States, so to-day municipal securities now occupy a similar position. The losses and disappointments which often came to those who invested their money in railway stocks and bonds are not so likely to be experienced in the case of municipal securities. The nature of the basis of investment is entirely different. Even losses by municipal corruption and misgovernment do not injure the investor to the degree experience has proved the holders of railway stocks and bonds may be injured by the manipulations of railroad wreckers.

The municipality in a prosperous country has a vitality that cannot be easily wrecked.

Attitude of New York State Savings-Banks to Municipal Bonds as Investments.—The savings-banks of New York State on January 1, 1904, had aggregate deposits of $1,131,281,943, and their aggregate resources amounted to $1,238,800,468.

The total investments of the banks making up the above totals amounted to $1,099,987,362.

Of that total real estate mortgages represented a total investment of $528,720,250. United States bonds, State bonds, and bonds of municipal corporations represented a total of $571,267,112. The latter investments were divided as follows: United States bonds, $18,657,880; District of Columbia, $3,294,800; State bonds representing New York, $350,000; other State bonds, $53,914,556; city bonds of New York State, $172,598,692; city bonds of States other than New York, $100,932,336; county bonds of New York, $20,087,199; town bonds of New York, $7,565,909; village bonds of New York, $12,439,452; school district bonds, $3,982,034; railroad bonds, $177,444,224.

It will be observed that the favorite forms of investment are in their order: (1) real estate mortgages, representing 48.07 per cent. of the total; (2) city bonds of all States representing 24.87 per cent. of the total, and (3) railroad bonds representing 16.13 per cent. of the total.

Credit of the First Municipality of the Country and Others.—Any city government that is in the market to sell bonds, as most of them are at frequent intervals, must show, first, the legality of its issue, and, second, the security behind the issue. Various elements enter into the security of such bonds, and in the aggregate—together with some sentimental considerations—they determine what is conveniently called the credit of the city. The most important of these elements are as follows: the total and per capita debt of the city, the actual market value of the taxable property back of the bonds, the assets owned by the city, including real estate, franchises, sinking funds, etc., the financial history of the city—in particular the number of years during which it has never made a default in the payment of any interest on other obligations—the efficiency and economy with which the finances of the city have generally been administered, the personnel of the present administration, the purposes for which the debts have been incurred and the proportion which are revenue producing, the actual income of the city and the way in which it is raised or earned, the actual and prospective contract obligations, the speculative improvements planned or under way, the form of accounting used, and the completeness with which the comptroller publishes his reports. The comptroller's report should make a clear showing of the assets and liabilities, as well as of receipts and disbursements, for a series of years.

As citizens of New York City think of the financial crimes perpetrated by the Tweed ring, and other similar though less monstrous depredations upon the treasury of the city which have blemished its history, they cannot claim for their city a

very high rank in all the elements named. But it is the distinction of New York City that its obligations, however dishonestly incurred, have always been honestly paid. In some other respects also the credit of New York City stands foremost.

Its unique natural advantages of situation must always insure to this city a great international commerce, a large cosmopolitan population, and a considerable measure of business prosperity, whatever the government may be. Almost from its foundation it has been governed as a municipal corporation enjoying a generous measure of autonomy. It owns much real property, which even the State cannot appropriate except under the right of eminent domain, in which case compensation must be made to it as if it were a private citizen.

The Mongomerie charter of 1730, among other very valuable properties and rights, conveyed to the corporation of the City of New York "all ferries now and hereafter to be established around the island of Manhattan"; also the right to "all docks, wharves, cranes, and slips or small docks within the city"; also extensive water fronts for a width of 400 feet above low-water. Subsequently the city granted the land under water extending 400 feet below low-water mark, for a distance of many miles. Its title to these properties thus antedate both the State and National governments. Unfortunately, not all these rights have been preserved. The greater part of the water front was granted away, but a part of it has since been taken back by condemnation proceedings.

In 1885 New York State adopted a constitutional amendment limiting the indebtedness of cities to 10 per cent. of the assessed valuation of their real estate liable to taxation. This indebtedness includes contracts and judgments outstanding.

November 30, 1905, the bonded debt of the City of New York was as follows:

Total gross funded debt	$587,392,726
Less sinking funds	165,835,612
	$421,557,114
Revenue bonds (temporary debt)	40,952,000
Total net	$462,509,114

June 1, 1905, the population of the city, according to the State census, was 4,014,305. The per capita bonded debt is therefore about $115. The assessed value of real property in the city is about $1,300 per capita.

Of the total funded debt of the city there had been issued, January 1, 1905, for revenue-earning enterprises, as follows:

Water purposes	$76,745,992
Docks and wharves	56,228,200
Subway construction	43,616,000

The City of New York is now committed to vast public improvements, consisting of an extension of its water supply, bridges over rivers and over railroad tracks, extensive tunnels, parks, schools, libraries, and other public institutions, and street improvements throughout the city.

The real estate belonging to the city is appraised at hundreds of millions of dollars. This schedule includes 7,326 acres of parks and open spaces. Central Park alone is appraised at $185,000,000.

A large city debt is often the sign of a wise, progressive government. The crucial question is, What does it represent? It is very misleading to compare the debts of cities without also comparing their revenues from the properties for which they were incurred, and also estimating the increased taxable value of private property benefited thereby.

Moreover, the lack of uniformity in municipal accounting and methods of finance make difficult a comparison of the financial condition of different cities, even in the same class. For example, the statement that the net indebtedness of Chicago in 1896 was approximately $17,000,000 in comparison with $120,000,000 for New York, is misleading, for several reasons. In particular, because in Illinois separate corporations were created covering the same area under different names, viz., city, county, park, district, and drainage district. The sum of the debts of these four corporations in 1896 amounted to $35,000,000. Comparative municipal finance in this country is in a much cruder state than it is in Europe. State boards of audit are greatly needed to introduce and supervise a uniform system of municipal accounting.

Prices of municipal bonds, like all commodities, are determined by the relation of supply and demand. A city's credit, together with the supply of money seeking such investment, determines the market price of the bonds. A recent quotation sheet for municipal bonds issued by cities all over the country shows that most of them yield from 3.5 per cent. to 4 per cent. on the present market price. The new issue of $20,000,000 New York City 4's is the first in twenty years of New York City bonds at a rate over 3.5 per cent. The necessity for the increased rate, to secure the sale of the bonds at par or above—as required by the city's charter—does not indicate an impaired credit, but only unusual commercial demands for money on the one side, and the knowledge of further large issues of like

bonds on the other. It has happened that the supply of such bonds has recently been largely increased, and must be further increased, while the amount of money seeking such conservative investments has temporarily decreased.

Coupon or Registered Bonds.—For several reasons coupon bonds are looked upon by security dealers as more desirable than registered bonds. In essence the difference between coupon bonds and registered is "negotiability versus safety."

A coupon bond, as it stands in no particular name, is naturally negotiable without trouble. It can be sold and passed from hand to hand with about as much facility as the greenbacks for which it is sold. The coupons cut from it as they fall due are practically so much cash, so far as the banks and trust companies in which they may be deposited are concerned. But there are quite a number of other points, besides negotiability, that make coupon bonds more desirable in the opinion of the dealer in investment securities.

One of these things is that many investors have an innate desire, when they start to invest in securities, to become "coupon clippers." Some investors, too, whose consciences trouble them around personal tax time regarding the swearing off of their assessment, find it convenient to acquire a line of non-taxable bonds—municipal and Government—the day before tax day. It is most convenient to take on a line of coupon bonds. These they can dispose of without trouble on the day after they have sworn regarding the non-taxability of their personal holdings.

Of course, for the purpose, registered bonds would do as well, excepting that coupon bonds can be sold again with no red-tape. As a general proposition, the mass of investment bonds ultimately drift into the registered form, because the estates and trusts which especially invest in such bonds like to register them in the estate or trust names, then putting them away in safe deposit boxes, and not bothering with the investments thereafter, except to receive the interest regularly and to arrange to collect the principal when the terms of the bonds run out.

The ordinary way in which bonds are disposed of by municipalities is the registered form. It is only when the municipality wishes to make a bond issue especially attractive, that it arranges to issue the bonds it sells in either registered or coupon form, as the successful bidder may elect.

In the case of the Government bonds it is a well recognized fact in bond-dealing circles that there is a better market for those in the coupon form. The existence of a small premium for coupon bonds over registered of the same issue is common.

There is at this time a premium of ¼ of 1 per cent. for the United States coupon 3 per cents, while the United States coupon long 4's command a premium of ½ of 1 per cent.

Foreign buyers of this country's bonds much prefer them in coupon form. The banking houses abroad will accept coupons clipped from United States Government bonds the same as so much cash, and a similar condition holds good in the case of coupons cut from the bonds of the larger American municipalities, such as New York and Philadelphia. Then again the foreign buyer of such securities ordinarily merely buys them "for a turn" rather than to hold them indefinitely. When the investment demand here has advanced the price of an issue of which they have been purchasers, the foreigners liquidate and "ship the bonds."

Of course registered bonds are the "safest" of the two classes. If lost or stolen, there is nothing to prevent the finder or the thief, as the case may be, from obtaining a ready market for a coupon bond. About the only thing the loser can do under the circumstances, provided he has kept a record of the number of the missing bond, is to advertise his loss as widely as possible, with a request that if the bond is offered for sale the offerer be held and the police notified. Naturally there is lots of difficulty for a dishonest person to successfully negotiate the sale of a registered bond, standing, as it does, in a particular name.

While Government and municipal bonds come in only two classes—registered and coupon—the large railroad companies commonly have three forms of issuing bonds. These are "coupon," "registered," which means registered as to both principal and interest, and a third class, which combines both the others and is "registered as to principal," but bears coupons for the interest.

Description of Municipal Bonds, A.—Municipal bonds are interest bearing, negotiable instruments issued by municipal corporations, usually to bearer, for a certain sum payable at a fixed time, the interest being represented by attached coupons, payable at fixed periods until the principal is to be paid. The bonds are issued for the purpose of raising money for local municipal necessities, such as improvements of highways, public buildings, public education, water supply, and street lighting. The laws governing the issue of these bonds are generally found in the Code of Municipal Corporation Laws, or in their charter, and usually limit the outstanding indebtedness to a certain percentage of the assessed valuation of both real estate and personal properties contained within the boundaries of the

community in which they are issued. The Legislatures in granting authority often impose, as a condition, a petition of the taxpayers or a vote of the electors previous to a sale of bonds, and they are almost invariably covered by a provision for a sinking fund, which means that they are to lay aside each year a certain amount to be used in taking up the bonds at maturity.

At the head of all bonds we would, of course, place the United States Government bonds. Second, the State bonds, and third, the bonds issued by municipalities. As the first two either bear a very low rate of interest, or are sold at a high premium, the latter is becoming more and more sought after by all classes of investors. Many are also used in their own sinking fund.

They are held largely by banks and banking institutions, trust and insurance companies, as well as by individuals. So highly are these securities considered that in a number of the States the various moneyed institutions have been authorized by statute to invest in such bonds, although issued by municipal corporations situated in other States. Such statutes, however, usually require that the municipality whose bonds may be thus held be not indebted above a certain percentage.

The rapid settlement of the vast territory of these United States and the marvelous growth in number of the various municipalities through it, as well as the phenomenal increase in population of the latter during the last fifty years, added to the increased municipal conveniences and necessities required by modern society, have compelled municipal corporations to resort to some means of obtaining money in order to make immediate local improvements for the health, comfort, convenience and general welfare of their inhabitants, and not to wait, before obtaining these, to raise the money therefor by the slow process of taxation. The means pursued to obtain this end by municipal corporations is the issuance of obligations, which are sold by it and the proceeds applied to obtain the needed municipal object. The obligations so issued are to be afterward paid by taxation.

This system is now so extensively adopted for the purpose of obtaining money for immediate use that it is estimated that at least $150,000,000 of municipal bonds are annually issued in the United States and placed upon the money market. These securities find a ready sale, and are regarded, for good reasons, as one of the safest ways of investing money.

A municipal bond, if legally issued, is one of the safest of investments, because it is the obligation of an American community, is payable from taxes, and the financial standing of

the municipality issuing the bond enters largely into the value of the bond. The high sense of honor in our American municipalities is such that notwithstanding the immense volume of municipal bonds issued in this country annually, the number of bonds that are repudiated, or even attempted to be repudiated, is so small that its percentage is scarcely ascertainable. A security whose payment experience has shown to be so certain that the risks are practically infinitesimal, can but be a good investment. Of course, the value of the bonds depends largely upon the fact of their being legally issued. The legality and regularity of the issuance of the bonds, the authority of the municipality to borrow money for the purposes for which the bonds are issued, and its legal authority to negotiate the bonds in question, is, and should be, one of the questions carefully investigated before investing in them. These questions of regularity and legality are questions for legal minds.

In selecting these bonds for an investment one must take into consideration the following: population, valuation, amount and nature of the various items of public debt, the value of the city's public property, the revenues of its water works and other proprietary institutions, the character of their industries, the amount of business done by their banks, whether they depend upon agriculture, manufacturing or mining for their prosperity, what the transportation facilities are, of what class of people the population is composed, whether the purpose of the issue is some needed public improvement or a measure of questionable soundness adopted by a party of enthusiasts to advance personal interests.

There is also much the same distinction made in rating of the credit of municipalities as of individuals. To illustrate: New York City, St. Louis, Cincinnati, Philadelphia, and Boston sell their credit on about a 3.35 per cent. basis; Detroit, Indianapolis, Milwaukee, Minneapolis, and St. Paul on about a 3½ per cent. basis, while Chicago sells on a 3¾ per cent. basis.*

The per capita of debt in each of these cities is: New York, $102.50; St. Louis, $40; Boston, $105; Detroit, $20; Indianapolis, $15; Milwaukee, $24; Minneapolis, $30; St. Paul, $54, and Chicago, $10.

There is, however, quite a marked difference between the assessed valuation of the property in these cities and of the assets and property owned by each. New York has a sinking fund investment of $127,000,000; Chicago, $2,433,000. New York assesses real property at about its true value, and its tax rate is 14.3 per cent. Chicago assesses at about 75 per cent. of its

*Not current market quotations.

real value, and has a tax rate of 15.82 per cent. All things being equal, Chicago, with the smallest per capita debt, should have the highest credit. Unfortunately, few other things are equal, so that the small per capita of debt is offset by a bad system of financing, which, it is claimed, is gradually growing better.

The rate of interest received by the investor on municipal bonds varies from about 1½ per cent. on United States Governments to, say, 4½ per cent. on the bonds of the smaller municipalities.

However, the bonds issued by the smaller but substantial municipalities for school purposes and other needed improvements are, perhaps, the most satisfactory investments to the average investor; as such bonds are obtainable at a rate of from 4 to 4½ per cent. interest, which is quite a difference between the net interest to the investor produced by the United States Government bonds.

It is getting to be the general custom in some of the States to require that municipal bonds be registered by a responsible trust company, in order to avoid the possibility of an over or duplicate issue.

If the indebtedness of a municipality is but moderate, and if, in the opinion of a competent and experienced attorney, such bonds are legally authorized, issued, and registered they are properly regarded "as one of the safest modes of investing money."

How Municipal Bond Values are Judged.—It should be remembered that the interest rate varies in the different States. For instance, California can issue a block of securities, speaking of the towns, etc., bearing interest as high as 7 per cent. and 8 per cent., while the State of Idaho is also permitted to float bonds at this figure. Municipalities throughout the States of New York, New Jersey, Pennsylvania, Massachusetts, Rhode Island, Connecticut, etc., generally sell their securities on a 3½ per cent. basis (1902–1903).

In figuring the value of a bond, maturing in twenty-five years, bearing 4 per cent. interest, in an amount of $30,000,—let us say of Harksville, Ohio,—the first principal matter to obtain is a financial statement of the city. If the assessed valuation is large enough, and the taxes are of such dimensions as to warrant the payment of both principal and interest, and if no litigation is pending or threatened, the securities are considered a good investment; and in figuring an income basis of 3.60 per cent. they can be easily disposed of.

The next important point to consider is the outstanding war-

rant and bonded indebtedness of the municipality. It must be remembered that every obligation which a city issues bears interest. The warrants fall due in two, three, four, or five or more years (these being issued and signed by the treasurer for work done by contractors or the payment of salaries), while the bonds can be fixed to mature in from five to fifty years. An excellent example of a bond value can be illustrated in the recent sale of a $1,000,000 4 per cent. ten and one-half year average building bonds, issued by the county of Cuyahoga, Ohio, and sold at a profit of $52,000, equaling 105.20, or an income basis of about 3.45 per cent. The standing of the county being excellent, all payments being met at the time of maturity, the bonds being for a goodly amount, and no litigation being threatened, all these factors aided in perfecting so pleasing a sale, both from the county and a banker's standpoint. In speaking of warrant indebtedness, the City of Minneapolis calls for sealed bids for the sale of certificates bearing date of some years back. These were evidently paid out to contractors, etc., and taken in by the sinking fund, which in turn offers the paper as an investment. This sale, however, will not bear upon the credit of the city, for payment has already been assured; and the warrants are offered to bankers, so that the interest may prove of benefit to the State, instead of lying idly in a safe until maturity.

Municipal Bonds, Legality of.—A New York trust company is authority for the following statements: "Nearly 50 per cent. of the public bond issues offered for sale are not properly authorized, requiring subsequent proceedings to satisfactorily establish their validity.

"Dealers and investors in securities of this class require that the legality of their purchases shall be established to the satisfaction of their attorney. This necessary precaution, however, usually occasions delay in the delivery of the bonds, and, not infrequently, results in the rejection of the bonds altogether, necessitating a re-advertisement and re-sale. In case of refunding bonds issued for the purpose of replacing bonds about to mature, such delays frequently result in serious embarrassment to the municipality.

"It is well known that when municipal bonds have been once rejected as illegal, they rarely bring as favorable a price at the second offering.

"The liability to delay causes the prospective purchaser to make allowance in his bid for such changes as may occur in the money market, as well as for the cost of legal services.

"It is therefore recommended that the municipality retain,

in advance of the sale, the services of an attorney making a specialty of municipal law, whose opinion will be satisfactory to dealers and investors generally, and to state in the advertisement for sale that the legality of the bonds has been approved by such atttorney, and that his opinion will be furnished to the purchaser; also that the bonds will be delivered at a stated place within a few days after the sale.

"The purchaser, being assured of the legality of the bonds without cost to him and their prompt delivery, will, in ordinary circumstances, add to his bid more than sufficient to offset the additional cost to the municipality."

Municipal Debt.—Reference has been made, says *Bradstreet's*, to the advance summary of the public debt of the United States for the year ending June 30, 1903, issued by the Census Office. The striking feature of the showing is the bulk and the marked growth in recent years of the debt of the municipalities and minor civil divisions of the country. It may be recalled that the total debt of the country, at the close of the fiscal year 1902, amounted to $2,789,207,463, which represented an increase of over $760,000,000 as compared with the year 1890, but a decrease of over $253,000,000 as compared with the year 1880, and of over $410,000,000 as compared with the year 1870, the census year next succeeding the close of the Civil War. The burden per capita, which stood at $82.99 in the last-mentioned year, fell to $60.66 in 1880, and to $32.39 in 1890, and rose from the latter point to $35.49 in the fiscal year 1902.

The decrease in the total volume of the debt during the period covered was mainly owing to the reduction in the national debt, which declined from $2,331,169,956 in 1870 to $890,784,370 in 1890, rising, however, to $925,011,637 in 1902. The per capita burden of this part of the debt fell from $60.46 in 1870 to $38.27 in 1880, to $14.22 in 1890, and to $11.77 in 1902, in spite of the increase in the volume of the debt itself between the last two dates. The debt of the States and Territories, which stood at $352,866,698 in 1870, declined to $274,745,772 in 1880 and to $211,924,765 in 1890. It increased to $234,314,-190 in 1902; but, notwithstanding this increment in the amount, the decrease in the burden per capita was continuous. The rate per head of population fell from $9.15 in 1870 to $5.48 in 1880, to $3.38 in 1890, and to $2.98 in 1902. In the last-mentioned period the greater number of States decreased their indebtedness; but a few—notably Massachusetts—increased their indebtedness to a considerable extent, so that for the whole body of States and Territories a net increase is shown. It is noteworthy, however, that, as remarked by the

Director of the Census, a large portion of the new debt in Massachusetts might, with almost equal propriety, be classed with municipal indebtedness, since it represents obligations incurred by the State for the abolition of grade crossings and the building of armories, both of which are for the benefit of local communities, and for such local improvements as those of the metropolitan water, sewer, and park districts around the city of Boston.

County indebtedness, taken as a whole, showed a decrease from 1870 to 1880, but a gradual increase since the last-mentioned year. The aggregate debt of counties stood at $187,-565,540 in 1870. It fell to $124,105,027 in 1880, but increased to $145,048,045 in 1890, and to $196,414,052 in 1902. This part of the total debt declined from $4.87 per capita in 1870 to $2.47 in 1880, and $2.32 in 1890, but increased to $2.50 in 1902. It will be seen that, taken together, the debts of the States and Territories and of the counties form but a small portion of the total public debt. Whether we regard the absolute amount or the amount per capita, they amounted to less than one-sixth of the whole in 1902.

It is, as will be seen, when we take up the figures for the debt of cities, villages, townships, precincts, that we lay our finger upon the source of the greatest increase. In 1870 this portion of the debt, which at that time included the indebtedness of school districts, was put at $328,244,520. By 1880 the debt of these local divisions, exclusive of that of school districts, had increased to $706,847,166, and by 1890 to $744,244,110, while in 1902 it stood at $1,387,279,569, or more than four times what it was in 1870, and not far from twice what it was in 1880. Meanwhile the debt of school districts increased from $17,580,-682 in 1880 to $46,188,015 in 1902. The per capita burden of the local debt was estimated at $8.51 in 1870. By 1880 the same class of debt, exclusive of that of school districts, showed a per capita burden of $14.09. In 1890 it fell to $11.89, but in 1892 it increased to $17.66, or nearly half the total per capita burden of debt of all kinds. The school district debt, it may be remarked, increased from $0.35 per capita in 1880 to $0.58 in 1890, and for 1902 no change is recorded from the latter figure.

In one of the tables compiled by the Census Bureau there are grouped together the total and per capita indebtedness, less sinking fund assets of counties and the minor civil divisions, including school districts, for the years 1880, 1890, and 1902. The figures given in this table are of interest as indicating the localities in which the burden of local debt has been greatest of late years. An examination of this table discloses the fact that in 1902 Rhode Island led all the other States as regards

the per capita amount of the local debt, with the sum of $56.84. This amount represented an increase of $20.32 in the dozen years that elapsed since 1890. Next in order came New York, with a per capita debt of $56.56, an increase of $23.31 since 1890. The State of Washington was third in the list, as regards per capita indebtedness, with $51.40 in 1902, as compared with only $8.14 in 1890. The District of Columbia was fourth in the list, with a per capita debt of $50.42, but this represented a decrease of $35.44 as compared with 1890. Massachusetts was fifth in order, with a per capita debt of $49.85, an increase of $16.67 over 1890. It should be remembered, however, that the indebtedness of the State itself, which, as has been said, was largely incurred for local purposes, increased from $9,812,198 in 1890 to $65,964,005 in 1902, and that the per capita burden of the State debt increased from $4.38 in the former to $22.87 in the latter year. New Jersey was sixth in order, with $40.85 per capita in 1902, an increase of $7.42, as compared with 1890. Indian Territory had the smallest per capita local debt in 1902 namely, $1.53; Arkansas being second, with $2.25; Mississippi coming third, with $3.45; and North Carolina and West Virginia following with $4.41 and $4.78, respectively. In all these cases increases are shown as compared with 1890. Speaking generally, the burden of local debt is heaviest in the North Atlantic States. and least in what are classified as the Southern South Atlantic group.

Municipal Extravagance.—Full returns from the first fifty cities of the country place the total indebtedness above the billion mark. The tendency is to increase rather than diminish the totals. In New York, for example, the city is already committed to and has under consideration vast public improvements, such as the extension of its system of water supply. its subway railroads, its park system, its school facilities, the enlargement of its police and fire departments, the building of bridges, schools, libraries, museums, and hospitals, and the opening, grading, and paving of streets. Other cities, too, have their schemes for public improvements, though on a less extensive scale than in this wealthy and ambitious metropolis.

It is interesting to note that municipal extravagance is not confined to this country. In a noteworthy address before the Institute of Bankers in London, Mr. Edgar Speyer, of the firm of Speyer Bros., of London, and Speyer & Co., of New York, sounded an emphatic and well-timed warning against extravagance, not only municipal, but also national and individual; and though this warning was directed more particularly to the British nation, it would apply with hardly less force to this

country. Municipal expenditure in Great Britain during the past ten years (to 1905), Mr. Speyer declared, had reached a total of more than $6,300,000,000, an excess of over $2,600,000,000 as compared with that of the previous ten years. To this general extravagance on the part of the nation, its cities and its citizens, he attributed the increase of British imports and the lack of increase of British exports.

It would be difficult in the matter of general extravagance to draw a parallel between the United States and Great Britain, for the latter country is still suffering from the effects of the Boer War, while the United States fortunately has been spared from a conflict of so costly a character; but in municipal extravagance there is evidently much similarity between Americans and Englishmen.

Municipal Indebtedness.—The report of Director North, of the Census Bureau, in regard to the finances of cities of 8,000 inhabitants and over, says:

"The importance of municipal statistics may be noted from the following facts: The indebtedness, less sinking fund assets, of the 148 cities containing over 30,000 inhabitants in 1903 was $1,106,821,651, and of the 151 cities in 1904 was $1,228,216,933. The indebtedness of the cities of the latter group increased during the year 1904 by $110,083,797. The indebtedness of cities containing 8,000 to 30,000 inhabitants in 1903 was $173,718,313, and the last statistics compiled recorded an annual increase of $10,098,961. The aggregate for the two classes of cities in 1903 was $1,280,539,964. The foregoing, combined with other facts relating to the increase of municipal debt, makes it certain that the present debt of cities of the United States containing over 8,000 inhabitants is in excess of $1,600,000,000, or greater than that of the combined debt of the national and State governments and of the counties, school districts, and other minor civil divisions.

"The payments and receipts of those cities having a population of 8,000 and over were greater than those of the United States Government in 1902, but somewhat less than those of that government in its last fiscal year. They also exceed the payments and receipts of all State and local governments.

"In 1900, 33 per cent. of the people of the United States resided in cities having a population of 8,000 and over, and in a few decades over one-half of the people will reside in those cities. The problem of self-government is therefore becoming one of city government, and no class of statistics is of such vital importance as that relating to cities, and especially to cities containing over 30,000 inhabitants."

Relative Merits of Municipal Bonds.—In 1904 there was in default through commercial failures $144,000,000; the total failures for five years aggregated $670,000,000. They were years of great financial achievement and industrial prosperity. During the same period no municipal bonds lawfully issued for legal purposes were in default. An investigation among banks and bond houses demonstrated that there have been no defaults in legal municipal bonds of the more settled communities in fifteen years. Municipalities have learned by experience that it is cheaper to pay their debts than be relieved of the burden by repudiation. Repudiation is the most expensive form of payment. States and municipalities that have practiced repudiation have irreparably injured their credit. The difficulty they experience in placing a loan, and, after placing it the high interest they are compelled to pay, is a burden which only years of faithful performance can lessen. In recent years this was realized by the citizens of Tacoma, who, rather than have the credit of their city questioned, raised by a popular subscription money to pay the interest about to fall due and in danger of default. In a debate on the relative merits of municipal bonds as compared with commercial paper one of the principals emphasized the safety and security of municipal bonds in times of commercial panic and financial stress for: (1) their genuineness is readily ascertainable; (2) the condition of the municipality is no secret; (3) the provision for their payment is made in advance by due process of law; (4) if ample provision be not made it may be compelled; (5) a municipality, generally, may not burden itself but for a very small proportion of the value of its property; (6) default in the payment of the interest on the principal of municipal bonds is of exceedingly rare occurrence; (7) the Government of the United States has accepted municipal bonds and municipal bonds only in lieu of Government bonds as security for United States deposits.

"Straight" and "Serial" Bonds.—The municipal bond issue question is of vital interest not only to investors but to every city, village, county and hamlet in the country. Every form of city improvement work is now contracted and paid for by bond issues, and there is a large and rapidly increasing debt being piled up for posterity. The matter of retirement is most important. The difference between the "straight" and the "serial" method of retirement concerns the maturity of issue. The straight method means maturity at thirty years; the serial plan, in from one to thirty years. It is usually the custom to accumulate a sinking fund which, theoretically, should just equal the principal of the debt at the time of redemption.

There are a number of objections to the sinking fund retirement. Firstly, money intended for the fund does not usually reach its destination; secondly, the city's bonded debt and sinking fund will eventually become a large amount of money to be handled and invested. There is objection that a fixed amount turned into the sinking fund may or may not be equal to the principal of the debt at the date of expiration, interest on investments varying from time to time. There is the further objection that the municipality must pay interest on the entire issue of bonds to maturity—that is, the interest charge on a bond issue is as heavy in the last as in the first year. Then there is the temptation to divert the sinking fund to other purposes, retiring the securities through a refunding issue, thus practically making no payment whatsoever.

A great many of these objections would be obviated by adopting the serial method. Under that plan it is necessary to make an annual appropriation for retiring a certain portion of the bonds, and there could be no passing over this appropriation from one year to another, for the bankers must be paid for the securities as per agreement. In this way the taxpayers would be likely to realize the cost of a heavy debt far more than they do under present systems. Citizens would have an object lesson in their tax bills each year which would instruct as to the cost of public improvements. No large debt could be rolled up under these conditions, and there would be no necessity for the creation of a sinking fund and its attendant dangers. With each payment the interest on the charges of bond issues would decrease as the outstanding amount of the bonds declined.

The serial plan affords the city an opportunity to pay off indebtedness from year to year, instead of saving redemption money in sinking funds and paying off the obligation in a lump sum. It is an admitted fact, however, that serial bonds do not bring the same price as "straight" or long term bonds, but it will prove a boon to the city in the end to issue serials rather than use the old method of straight redemption.

Study of Indebtedness of Thirteen Cities, A.—There appeared, in 1905, in the annals of the American Academy of Political and Social Science, a series of studies on the municipal debt of thirteen large American cities. The writers succinctly outlined the debts. One item in the outline in each case was headed, "proportion (of debt) used in profit-bearing enterprises." This item was as follows for the cities named:

New York, for water, $76,745,993; for docks, $56,228,200; for rapid transit, $43,616,000; total, $176,590,113.

Boston, for water, $8,226,000; for ferries, $669,000; for rapid transit, $3,434,000; total, $12,329,000—18.41 per cent. of gross debt.

Baltimore, for water, $8,627,500; for rapid transit, $1,220,000; total, $9,847,500—24.6 per cent. of gross debt.

Cleveland, for water, $3,950,000; for cemeteries, $150,000; for markets, $160,000; total, $4,260,000—19.6 per cent. of gross debt.

Cincinnati, for water, $6,828,600; for railways, $16,353,000; total, $23,181,600—62.4 per cent. of gross debt.

Providence, for water, $5,647,000—31.4 per cent. of gross debt.

Grand Rapids, total, $1,225,000—55 per cent. of gross debt.

Duluth, total, $2,606,000—50 per cent, of gross debt.

The debts of these cities compared as follows:

	Gross.	*Sinking Fund.*	*Net*
New York	$558,265,517	$157,330,352	$400,935,165
Boston	94,181,606	31,691,386	62,490,220
Baltimore	39,962,882	24,241,823	15,721,059
Cleveland	21,739,402	2,824,098	18,915,304
Cincinnati	36,818,140	5,574,211	31,243,920
Pittsburg	21,002,001	7,144,981	13,857,021
New Orleans	24,158,937	....	24,158,937
Milwaukee	7,092,750	....	7,092,750
Washington, D. C.	12,492,700	....	12,492,700
Providence	18,231,834	4,759,128	13,472,706
Grand Rapids	2,204,000	....	2,204,000
Seattle	4,635,000	....	4,635,000
Duluth	5,245,250	110,819	5,134,431

From the above figures, the following statement may be compiled:

	Est. Population 1905.	*Per Capita Net Debt.*
New York	3,850,000	$104
Boston	621,111	100
Baltimore	550,000	28
Cleveland	482,000	39
Cincinnati	410,000	76
Pittsburg	347,000	40
New Orleans	330,000	73
Milwaukee	325,000	21
Washington, D. C.	300,000	42
Providence	190,000	71
Grand Rapids	98,000	22
Seattle	150,000	33
Duluth	70,000	73

State and Municipal Debt Analyzed.—According to *The Financial Chronicle*, during the calendar year 1903 the States and Territories of the United States, and their municipalities, issued bonds amounting in the aggregate to $152,281,050:

Of that amount State bonds amounting to $8,974,650, or 5.89 per cent. of the total, were issued.

County bonds reached an aggregate of $16,024,726, or 10.52 per cent. of the total.

School district bonds issued aggregated $9,274,920, or 6.09 per cent. of the total.

Municipal bonds aggregate $118,006,754, or 77.49 per cent. of the total.

Refunding operations account for 8.69 per cent. of the total, leaving 91.30 per cent. as the net addition to the total combined debt.

The above bonds were issued for the following purposes: For water, 14.44 per cent.; streets and bridges, 20.51 per cent.; sewers and drainage, 10.60 per cent.; schools and school buildings, 10.28 per cent.; general buildings, 8.56 per cent.; parks and museums, 5.16 per cent.; electric light and gas, 1.20 per cent.; funding and improvement, 3.87 per cent.; miscellaneous, 16.64 per cent.

All but approximately 7 per cent. of the total issue of these bonds bear interest at the rate of 3 to 5 per cent. Of the total 1903 issue 11.45 per cent. bear interest at the rate of 3 per cent.: 35.92 per cent. of the total issue bear interest at the rate of 3½ per cent.; 31.17 per cent. of the total bear interest at the rate of 4 per cent.; 5 and 7 per cent. of the total bear interest at the rate of 4½ per cent.; 8.94 per cent. of the total bear interest at the rate of 5 per cent.; 3.06 per cent. of the total bear interest at a rate higher than 5 per cent.; and 3.59 per cent. of the total pay an unknown or unusual rate of interest.

State, County, and Municipal Debt Limitations.—

STATE OF ALABAMA.

Constitutional Limitation.—Article XI. of the Constitution, adopted 1875, contains this limitation of the State debt-making power: "After the ratification of this Constitution, no new debt shall be created against or incurred by this State, or its authority, except to repel invasion or suppress insurrection, and then only by a concurrence of two-thirds of the members of each house of the General Assembly, and then vote shall be taken by yeas and nays, and entered on the journals; and any act creating or incurring any new debt against the State, except as herein provided for, shall be absolutely void; *Provided*, the Governor may be authorized to negotiate temporary loans, never to exceed one hundred thousand dollars, to meet deficiencies in the treasury; and until the sum is paid no new loan shall be negotiated; *Provided, further*, that this section shall not be so construed as to prevent the issuance of bonds in adjustment of existing State indebtedness."

STATE OF ARKANSAS.

Constitutional Limitation.—The State Constitution (1874) prohibits the loaning of the credit of the State, or of any political division of it, for any

purpose whatever; and prohibits the State from assuming or paying the debts or other liabilities of any county, town, city, or other corporation, unless such debt was created to repel invasion, suppress insurrection, or to provide for the public welfare. It also provides that no county, city, town, or other municipality shall issue interest-bearing evidences of indebtedness, except such bonds as may be authorized by law to provide for and secure the payment of the present existing indebtedness, and that the State shall never issue any interest-bearing treasury warrant or scrip.

STATE OF CALIFORNIA.

Constitutional Limitation.—It is provided that no county, city, town, board of education, or school district shall incur any indebtedness exceeding in any year the revenue provided for it for such year, without the assent or two-thirds of the qualified voters, and provision must be made for an annual tax sufficient to meet interest as it falls due, and to constitute a sinking fund for the payment of the debt principal within twenty years.

STATE OF COLORADO.

Constitutional Limitation—State Debt.—The Constitution prohibits the creation of any debt "except to provide for casual deficiencies of revenue, erect public buildings for use of the State, suppress insurrection, defend the State, or assist in defending the United States." The debt contracted in any year to meet "casual deficiencies" is limited to $100,000; the public building debt, to $300,000, and then only after having obtained the sanction of a majority of the qualified voters of the State. In 1876, the State assumed $42,000 of territorial debt, and subsequently it was paid off. In 1877, the State began to issue "treasury warrants" and "certificates of indebtedness," and in 1881, "loco weed certificates," under the constitutional provision permitting the creation of debt to meet deficiencies of revenue. There has been a difference of opinion as to whether the amount outstanding has not exceeded the constitutional limit.

Counties.—The Constitution prohibits the creation of debt by any county, except for the purpose of erecting public buildings, making or repairing public roads and bridges; and the amount of such indebtedness created in any year is limited to $3 on the $1,000 of taxable value of property in counties where that value is less than $5,000,000, and to $1.50 on the $1,000 where it exceeds $5,000,000; and the aggregate indebtedness of any county can never, at any time, exceed twice the amount fixed by the above limit, without the sanction of a majority of votes cast at a special election held for the purpose of submitting that question.

Cities and Towns.—The State Constitution prohibits the creation of any debt by any city or town, "except by means of an ordinance, which shall be irrepealable, until the indebtedness therein provided for shall have been discharged, specifying the purpose to which the funds to be raised shall be applied, and providing for the levy of a tax sufficient to pay the annual interest and discharge the principal of such debt within fifteen years, but not less than ten years from the creation of such debt"; but no debt shall be created without the sanction of a majority of votes of qualified electors; and the aggregate debt shall never exceed 3 per cent. of the property in valuation. Debts contracted for supplying water to cities or towns are, however, excepted from the operation of this section of the Constitution.

STATE OF CONNECTICUT.

Constitutional Limitation.—The State Constitution, by an amendment adopted in 1877, prohibits the loaning of the credit of any county, city, town, borough, or other municipality to any railroad corporation, or mak-

ing any donation to, or subscribing to, the capital stock of any such corporation; but this prohibition does not affect the validity of any bond or debt incurred under existing laws prior to the adoption of the amendment. The Revised Statutes provide that "when any town shall have made appropriations or incurred debts, or shall hereafter make appropriations or incur debts exceeding $10,000, it may issue bonds, either registered or with coupons attached, or other obligations, payable at such times and at such annual rate of interest, not exceeding 6 per cent., payable annually or semi-annually, as it shall determine.

STATE OF DELAWARE.

Constitutional Limitations.—There are no general provisions regulating the creation of debt. The State, however, is forbidden to borrow money or create debt. Article VIII., Section 3, however, provides for "casual deficiencies, repelling invasions, defense of the State in war, and the payment of existing debts."

No county, city, town, or other municipality is permitted to "lend its credit or appropriate money to, or assume the debt of, or become a shareholder or joint owner in, or with, any private corporation or any person or company whatever."

The power of municipal debt creation rests with the General Assembly, and the General Assembly considers and passes special acts to provide special requirements.

STATE OF GEORGIA.

Constitutional Limitation.—The State Constitution adopted in December, 1877, prohibits the creation of any bonded indebtedness by or in behalf of the State, except to repel invasion, suppress insurrection, or defend the State in time of war, and limits the amount of floating debt which may be temporarily incurred in case of deficiency in the revenues to $200,000.

Debt Limitation of Cities and Towns.—The State Constitution prohibits the creation of debt by cities in excess of 7 per cent. of the assessed valuation of taxable property, and also requires the levy of a sufficient tax to pay the interest and principal of all bonds that are issued.

STATE OF IDAHO.

Constitutional Limitation.—The Constitution limits the total debt, except in case of war, invasion, or insurrection, to 1½ per cent. of assessed valuation, unless authorized by special law for some single specified work, such law (which must be submitted to the people and receive a majority of all the votes cast) to provide means other than loans for meeting annual interest and retiring principal within twenty years, and prohibits the State loaning its credit to, or becoming a stockholder in, any corporation or association.

"No county, city, town, township, board of education, or school district, or other subdivision of the State, shall incur any indebtedness or liability" in any year exceeding the income provided for it in such year, without the assent of two-thirds of the qualified electors, and unless a tax is provided for sufficient to meet principal and interest as they become due.

STATE OF ILLINOIS.

Constitutional Limitation.—Counties are prohibited by law from issuing bonds to an amount, in the aggregate, exceeding 5 per cent. of the taxable property therein, as shown by the last previous assessment for State and county

taxes. County authorities cannot assess taxes, the aggregate of which shall exceed 75 cents on $100 valuation, unless authorized by a vote of the people.

The Constitution prohibits any city, township, school district, or other municipal corporation from being indebted to an amount, in the aggregate, exceeding 5 per cent. of the taxable property therein, as shown by the last previous assessment for State and county taxes.

STATE OF INDIANA.

Constitutional Limitation.—The Constitution prohibits the creation of any debt by the State, except "to meet casual deficits in the revenue, to pay interest on the State debt, to repel invasion, suppress insurrection, or, if hostilities be threatened, provide for the public defense. It also prohibits the assumption by the State of the debts of any municipality or corporation.

STATE OF IOWA.

Constitutional Limitations.—Article VII. Section 1. [*Limitation of State Indebtedness.*] The credit of the State shall not, in any manner, be given or loaned to, or in aid of, any individual, association or corporation; and the State shall never assume, or become responsible for the debts or liabilities of any individual, association or corporation, unless incurred in time of war for the benefit of the State.

Section 2. [*Limitation of State Indebtedness.*] The State may contract debts to supply casual deficits or failures in revenues, or to meet expenses otherwise provided for; but the aggregate amount of such debts must never exceed $250,000.

Section 4. [*For what other purposes State may contract debt.*] In addition to the above limited power to contract debts, the State may contract debts to repel invasion, suppress insurrection, or defend the State in war; but the money shall be applied for the purpose for which it was raised, or to repay such debts.

Section 5. [*Other debts to be authorized.*] Except the debts hereinbefore specified in this article, no debt shall be hereafter contracted by or on behalf of this State, unless such debt shall be authorized by some law for some single work or object, to be distinctly specified therein; and such law shall impose and provide for the collection of a direct annual tax sufficient to pay the interest on such debt as it falls due, and also to pay and discharge the principal of such debt within twenty years from the time of contracting thereof; but no such law shall take effect until, at a general election, it shall have been submitted to the people, and have received a majority of all the votes cast for and against it at such election.

Article VIII. Section 3. [*State not to be a stockholder.*] The State shall not become a stockholder in any corporation, nor shall it assume or pay the debt or liability of any corporation, unless incurred in time of war for the benefit of the State.

The limit of municipal indebtedness is fixed absolutely by the Constitution as follows:

Article VIII. Section 4. [*Corporation not to be a stockholder.*] No political or municipal corporation shall become a stockholder in any banking corporation, directly or indirectly.

Article XI. Section 3. [*To what amount county may become indebted.*] No county or other political or municipal corporation shall be allowed to become indebted, in any manner or for any purpose, to an amount in the aggregate exceeding 5 per cent. on the value of the taxable property within such county or corporation.

Subsequently (1900) a lower limit of indebtedness was fixed by the Legislature, which adopted the following bill:

Section 1. "That Section 1306 of the Code be, and is hereby, repealed, and the following enacted in lieu thereof:

"Section 2. No county or other political or municipal corporation, including cities acting under special charters, shall be allowed to become indebted, in any manner or for any purpose, to an amount, in the aggregate, exceeding 1½ per cent. on the actual value of the property within such county or corporation, to be ascertained by the last State and county tax list previous to the incurring of such indebtedness."

In 1904 the Iowa Legislature passed an act that permits independent school districts to become indebted for the purpose of building and furnishing schoolhouses and buying sites therefor, to an amount not exceeding 2½ per cent. of the actual value of taxable property. Any excess of the 1½ per cent. limit, however, it is expressly stipulated, must be authorized by a vote of the people.

INDIAN TERRITORY.

Constitutional Limitations.—According to Chapter 816, of the Laws of the Fifty-seventh Congress, any incorporated town or city in the Territory having a population of 2,000 or more can issue bonds for sewers, water-works, and schoolhouses. Bonds of all classes must not "exceed an amount the interest on which, at 5 per cent., would be liquidated by a tax of five mills upon the dollar of the valuation of the taxable property of each city or town." Also the bonds must be authorized by a two-thirds vote at a special election; also a judge of the United States Court for the judicial district in which the debt-making municipality is located must determine, to his satisfaction, that the requirements of the act have been met. Bonds authorized under any special act are included as part of the debt limit. Municipalities creating debt under the act must, by *irrepealable* ordinance, provide for the collection of an annual tax sufficient to pay the interest on bonds as it falls due, and also for the payment and discharge of the principal within twenty years.

STATE OF KANSAS.

Constitutional Limitations.—The State has power to contract public debts for extraordinary expenses and public improvements to an amount not exceeding $1,000,000. This limit may be exceeded by a majority vote of electors, or in borrowing money to repel invasion, etc. The State cannot be a party to internal improvements.

The Kansas Constitution does not restrict municipal indebtedness. It does, however, contain the following provision:

Cities.—Provision shall be made by general law for the organization of cities, towns, and villages; and their power of taxation, assessment, borrowing money, contracting debts, and loaning their credit shall be so restricted as to prevent the abuse of such power.

Under this provision, the legislation has become very voluminous. In 1903, a law was passed fixing 15 per cent. of the assessed value of taxable property as the limit of bonded debt of any city of 50,000 or more. Special improvements and sewer bonds (assessed on property improved) are, however, outside of this limit. The total bonded debt (including special improvements), must not exceed 30 per cent. of assessed values.

STATE OF KENTUCKY.

Constitutional Limitations.—*Constitution of* 1891. Section 49. The General Assembly may contract debts to meet casual deficits or failures in the revenue; but such debts shall not exceed $500,000. *Provided*, the General Assembly may contract debts to repel invasion, suppress insurrection, or, if hostilities are threatened, provide for the public defense.

Section 50. No act of the General Assembly shall authorize any debt to

be contracted on behalf of the commonwealth, except for the purposes mentioned in Section 49, unless provision be made therein to levy and collect an annual tax sufficient to pay the interest stipulated, and to discharge the debt within thirty years; nor shall such act take effect until it shall have been submitted to the people at a general election and shall have received a majority of all the votes cast for and against it; *Provided*, the General Assembly may contract debts by borrowing money to pay any part of the debt of the State without submission to the people, and without making provision in the act authorizing the same for a tax sufficient to discharge the debt so contracted or the interest thereon.

Cities, Towns, etc.—Cities, towns, counties, taxing districts, and other municipalities are restricted by Sections 157 and 158 of the Constitution.

Under Section 157, no debt of any kind may be created to an amount exceeding, in any one year, the income and revenue provided for such year, *unless* authorized by a two-thirds vote of the voters, balloting at an election designated for that purpose.

Under Section 158, cities having more than 15,000 population are limited in debt-creating power to 10 per cent. of the taxable property; cities and towns of more than 3,000 and less than 15,000 inhabitants, 5 per cent.; cities and towns of less than 3,000, 3 per cent.; counties, taxing districts, and other municipalities, 2 per cent.

There are some exceptions to the above limits.

STATE OF LOUISIANA.

Constitutional Limitations.—The debt-creating power of municipalities is limited to 10 per cent. upon the assessed value of the property of the municipal corporation, parish, or drainage district.

STATE OF MAINE.

Constitutional Limitations.—In 1878, this amendment to the State Constitution was adopted: Article XXII. Limitation of municipal indebtedness. No city or town shall create any debt or liability which, singly or in the aggregate, with previous debts or liabilities, shall exceed 5 per cent. of the last regular valuation of said city or town; *Provided, however*, that the adoption of this article shall not be construed as applying to any fund received in trust by the said city or town, nor to any loan for the purpose of renewing existing loans, or for war, or to temporary loans to be paid out of money raised by taxation during the year in which they are made.

STATE OF MARYLAND.

Constitutional Limitations.—The Constitution does not limit the power of the Legislature to authorize bond issues by the State, or by municipalities within its limits. Giving or lending money to individual associations or corporations is prohibited; also the extension of aid or credit is forbidden to works of internal improvement. The debt-creating power of counties and cities is lodged in the Legislature, which takes action on specific cases. Bond buyers are obliged, therefore, to study not only the general laws, but the law in each case in which he is interested.

STATE OF MASSACHUSETTS.

Constitutional Limitations.—Apparently the Constitution does not limit legislative power in creating State indebtedness, or in authorizing municipal indebtedness. General and special statutes have been passed, as respects cities and towns. The general provisions are included in Chapter 27

of the Revised Statutes, 1902. The general provisions are exhaustive in scope and phraseology, and there are various special laws providing for exceptions to the general law in the matter of debt limitation of particular cities and towns.

STATE OF MICHIGAN.

Constitutional Limitations.—*Article XIV. of the Constitution (adopted in 1850).* Section 3. The State may contract debts to meet deficits in revenue. Such debts shall not, in the aggregate, at any one time, exceed $50,000.

Section 4. The State may contract debts to repel invasion, suppress insurrection, or defend the State in time of war.

Section 6. The credit of the State shall not be granted to or in aid of any person, association, or corporation.

Section 7. No scrip, certificate, or other evidence of State indebtedness shall be issued except for the redemption of stock previously issued, or for such debts as are expressly authorized in this Constitution.

Section 8. The State shall not subscribe to, or be interested in, the stock of any company, association, or corporation.

Section 9. The State shall not be a party to, or interested in, any work of internal improvement, nor engage in carrying on any such work, except in the expenditure of grants to the State of land or other property.

Provisions relating to cities and villages, Article XV., Section 13, read:

Section 13. The Legislature shall provide for the incorporation and organization of cities and villages, and shall restrict their powers of taxation, borrowing money, contracting debts, and loaning their credit.

In addition to this section, the Legislature has enacted general laws regulating the incorporation, taxation, and bonding of cities and villages. They are lengthy, and may be had in full in the "Laws of Michigan," published in 1897.

STATE OF MINNESOTA.

Constitutional Limitation.—The Constitution limits the debt of the State to $250,000, "for the purpose of defraying extraordinary expenses," but such debts must be authorized by law for some special purpose, and provision must be made for a tax levy to pay the interest yearly and the principal within ten years. By amendment, adopted November 15, 1872, additional bonds, to an amount not exceeding $250,000, payable in not less than ten years nor more than thirty years, are authorized for the erection or completion of certain public buildings. Any county, town, or incorporated city or village is authorized to issue bonds to an amount not exceeding, with outstanding indebtedness, 5 per cent. of its assessed valuation, for the purpose of aiding in the construction of railroads. A tax must be levied yearly as it accrues, and to provide for the payment of the principal at maturity.

STATE OF MONTANA.

Constitutional Limitations.—The State Constitution (1899) prohibits the creation of any debt by or on behalf of the State, except by a law which shall specify the purpose of the loan and provide means for paying the interest yearly and the principal at maturity; but the debt of the State shall never exceed, in the aggregate, the sum of $100,000, except in case of war, invasion, or insurrection, unless the law authorizing the same shall have been submitted to the people at a general election, and shall have received a majority of all the votes cast for and against it at such election. No county shall incur any indebtedness or liability for any single purpose to an amount exceeding $10,000, without the approval of a majority of the electors, voting at an election to be provided by law; but in no case shall the debt of any county exceed, in the

aggregate, a sum equal to 5 per cent. of the value of taxable property, and all bonds in excess of such amount shall be void. No city, town, township, or school district shall be allowed to become indebted in any manner or for any purpose to an amount, including existing indebtedness, in the aggregate exceeding 3 per cent. of the value of its taxable property, and all bonds or obligations in excess of that amount shall be void; *Provided, however*, that the Legislative Assembly may extend this limit by authorizing municipal corporations to submit the question to a vote of the taxpayers affected thereby, when such increase is necessary to construct a sewerage system or to procure a supply of water for such municipality, which shall own and control said water suppy, and devote the revenues derived therefrom to the payment of the debt.

STATE OF NEBRASKA.

Constitutional Limitations.—The Constitution provides that the State may issue bonds to meet casual deficits or failure in the revenue to an amount, except in cases of invasion, insurrection, or war, not exceeding, in the aggregate, $100,000, and provision shall be made, by an irrepealable law, for the payment of the interest annually, as it shall accrue, by a tax levied for the purpose, or from other sources of revenue. Counties may issue bonds or other forms of indebtedness for county buildings, but no appropriation for that purpose shall be to an amount exceeding $1,500, unless specifically authorized by a three-fifths vote of the people. Counties, cities, and other State subdivisions are also authorized to issue bonds for the purpose of providing public works and buildings, and for the purpose of funding outstanding indebtedness. The loaning of the credit of the State is prohibited; but counties, cities, and towns, and other subdivisions of the State may, if authorized by a two-thirds vote of the people, but not otherwise, make donations to railroads and other works of internal improvement to an amount including, in the aggregate (the donations of county and subdivisions being reckoned), 10 per cent. of the assessed valuation of the county, which sum may be increased to 15 per cent., if authorized by a two-thirds vote of the people. No city, county, town, precinct, municipality, or other subdivision of the State shall ever become a subscriber to the capital stock or owner of such stock, or any portion or interest therein, of any railroad or private corporation or association.

STATE OF NEVADA.

Constitutional Limitations.—The Constitution provides that all estates that may escheat to the State, all the proceeds from land sales, etc., shall be invested in bonds of the United States, or of any of the States of the Union, and that the interest shall be used for educational purposes only. The State is limited to an indebtedness of $300,000, except for the purpose of defraying extraordinary expenses arising from invasion, insurrection, or war, and provision must be made for an annual tax sufficient to meet interest and principal as they become due. The State is prohibited from assuming the debt of any county, city, town, or other corporation unless such debts have been created to repel invasion, suppress insurrection, or provide for the public defense. The State is also prohibited from loaning money or credit or subscribing to the stock of any corporation, except such as are formed for educational or charitable purposes. The Constitution puts no limit to the debts of counties, cities, etc., but provides that the Legislature shall make general laws restricting their powers of taxation, assessment, borrowing money, contracting debts, loaning their credit, except for procuring supplies of water. It is also provided that no county, city, town, or other municipal corporation, shall become a stockholder in any joint stock company, corporation, or association whatever, or loan its credit in aid of any such company, corporation, or association, except railroad corporations, companies, or associations.

STATE OF NEW HAMPSHIRE.

Constitutional Limitations.—The Constitution does not restrict the debt-creating power of the people through the "General Court," except in the last clause of Article V. of Part II., which reads:

"*Provided*, that the General Court shall not authorize any town to loan or give its money or credit directly or indirectly for the benefit of any corporation having for its object a dividend of profits, or in any way aid the same by taking its stocks or bonds."

The Municipal Bond Act of 1895 regulates the issue of bonds by municipal corporations; but in special cases, at times, exceptions have been made thereto. This law provides: Section 1. The words municipal corporation mean town, city, school district, village district, and village precinct. Section 2. Bonds issued must be payable within twenty years, interest semi-annual, not exceeding 6 per cent., and may be payable in gold coin. If made payable in less than twenty years, the time may be extended, but not beyond twenty years from date of issue. Section 3. Bonds (except for cities) have to be authorized by a two-thirds vote of all voters present and voting at an annual or properly called special meeting of such corporation. Bonds must be signed by a majority of the Governing Board, countersigned by the Treasurer, and have seal of corporation. Time and place of payment and rate of interest and other details can be delegated to the Governing Board. Section 4. City bonds must be authorized by resolution of City Council, passed by at least two-thirds of members elected to each branch, taken by yeas and nays, signed by Mayor, countersigned by Treasurer, seal of city affixed. Place of payment, rate of interest, and sale may be delegated to the Treasurer. Section 5. Bonds must be payable to bearer or registered holder by name, and must be in form set out in the act. If the bonds are issued subject to call, the fact must be printed therein. The act contains sets of forms, but it is provided that "the validity of any bonds shall not be affected by any variation from the forms herein prescribed." Section 6. The Treasurer is to keep a record of registered bonds issued, etc. Section 7. "All bonds purporting to be issued by virtue of this act and signed and sealed as provided, shall, in favor of *bona fide* holders, be conclusively presumed to have been duly and regularly authorized and issued in accordance with the provisions herein contained, and no holder thereof shall be obliged to see to the existence of the purpose of the issue, or to the regularity of any of the proceedings, or to the application of the proceeds. All such bonds shall be negotiable in all respects and to the same extent as securities negotiable by the law merchant." Section 8. Annual tax, sufficient to pay interest and provide a sinking fund sufficient to pay principal within twenty years must be levied and collected. Section 9. Bonds cannot be issued increasing the net debt of any corporation to an amount in excess of 5 per cent. of the value of the taxable property therein as last appraised in tax assessment. In ascertaining *net* debts, all debts must be included except the following, which can be deducted: water debt, "cash and other means" in treasury, and sinking funds applicable to payment of debt so included; "but nothing contained in this section shall prevent the issue of bonds for the purpose of refunding an equal principal amount of other bonds of such corporation."

STATE OF NEW JERSEY.

Constitutional Limitations.—The Constitution prohibits the creation of any debt of the State which shall, singly or in the aggregate, with any previous debts or liabilities, at any time exceed $100,000, except in case of war, insurrection, or rebellion, unless authorized by a law for some single object of work, to be distinctly specified therein. It is also provided that the credit of the State shall not be directly or indirectly loaned in any case, and that no county, city, borough, town, township, or village shall give any money or property, or loan its money or credit to or in aid of any individual, association, or corporation, or become security for or be directly or indirectly the owner of any stock

or bonds of any association or corporation; also that no donation of land or appropriation of money shall be made by the State, or any municipal corporation, to or for the use of any society, association, or corporation whatever.

STATE OF NEW YORK.

Debt Limitation.—To some extent the new Constitution has modified the original provisions of the fundamental law controlling the power of the Legislature over the debt issue. Article VII., in part, is as follows:

State Credit not to be Given.—Section 1. The credit of the State shall not, in any manner, be given or loaned to or in aid of any individual, association, or corporation.

State Debts, Power to Contract.—Section 2. The State may, to meet casual deficits or failures in revenue, or for expenses not provided for, contract debts; but such debts, direct or contingent, singly or in the aggregate, shall not, at any time, exceed one million of dollars; and the moneys arising from the loans creating such debts shall be applied to the purpose for which they were obtained, or to repay the debt so contracted, and to no other purpose whatever.

State Debts to Repel Invasions.—Section 3. In addition to the above limited power to contract debts, the State may contract debts to repel invasion, suppress insurrection, or defend the State in war; but the money arising from the contracting of such debts shall be applied to the purpose for which it was raised, or to repay such debts, and to no other purpose whatever.

Limitation of Legislative Power to Create Debts.—Section 4. Except the debts specified in Sections 2 and 3 of this article, no debt shall be hereafter contracted by or on behalf of this State, unless such debt shall be authorized by a law for some single work or object, to be distinctly specified therein; and such law shall impose and provide for the collection of a direct annual tax to pay, and sufficient to pay, the interest on such debt as it falls due, and also to pay and discharge the principal of such debt within eighteen years from the time of contracting thereof. No such law shall take effect until it shall, at a general election, have been submitted to the people, and have received a majority of all the votes cast for and against it at such election. On the final passage of such bill in either house of the Legislature, the question shall be taken by ayes and noes, to be duly entered on the journals thereof, and shall be: "Shall this bill pass, and ought the same to receive the sanction of the people?" The Legislature may, at any time after the approval of such law by the people, if no debt shall have been contracted in pursuance thereof, repeal the same; and may at any time, by law, forbid the contracting of any further debt or liability under such law; but the tax imposed by such act, in proportion to the debt and liability which may have been contracted, in pursuance of such law, shall remain in force and be irrepealable, and be annually collected, until the proceeds thereof shall have made the provision hereinbefore specified to pay and discharge the interest and principal of such debt and liability. The money arising from any loan or stock creating such debt or liability shall be applied to the work or object specified in the act authorizing such debt or liability, or for the repayment of such debt or liability, and for no other purpose whatever. No such law shall be submitted to be voted on within three months after its passage, or at any general election when any other law or any bill, or any amendment to the Constitution, shall be submitted, to be voted for or against.

Sinking Fund, How Kept and Invested.—Section 5. The sinking funds provided for the payment of interest and the extinguishment of the principal of the debts of the State shall be separately kept and safely invested, and neither of them shall be appropriated or used in any manner other than for the specific purpose for which it shall have been provided.

Prepared Issue of Bonds for Highways.—In 1903, a new section—Section 12—to Article VII. was proposed in the Legislature. This section provides for a debt of $50,000,000 for highways. The resolution, under the law, was deferred for consideration by a succeeding Legislature.

DEBT LIMITATION OF CITIES, COUNTIES, TOWNS, AND VILLAGES.

New York's new Constituion uniformly limits the debt-creating power of all counties and cities; the Legislature fixes the debt-creating power of villages and towns. These provisions are quoted from Article VIII., Section 10:

(*a*) No county, city, town, or village shall hereafter give any money or property, or loan its money or credit, to or in aid of any individual, association, or corporation, or become directly or indirectly the owner of stock in, or bond of, any association or corporation; nor shall any such county, city, town, or village be allowed to incur any indebtedness except for county, city, town, or village purposes. This section shall not prevent such county, city, town, or village from making such provision for the aid or support of its poor as may be authorized by law.

(*b*) No county or city shall be allowed to become indebted for any purpose or in any manner to an amount which, including existing indebtedness, shall exceed 10 per cent. of the assessed valuation of the real estate of such county or city subject to taxation, as it appeared by the assessment rolls of said county or city on the last assessment for State or county taxes prior to the incurring of such indebtedness; and all indebtedness in excess of such limitation, except such as may now exist, shall be absolutely void, except as herein otherwise provided.

(*c*) No county or city whose present indebtedness exceeds 10 per cent. of the assessed valuation of its real estate subject to taxation, shall be allowed to become indebted in any further amount until such indebtedness shall be reduced within such limit.

(*d*) This section shall not be construed to prevent the issue of bonds to provide for the supply of water; but the term of the bonds issued to provide the supply of water shall not exceed twenty years, and a sinking fund shall be created on the issuing of the said bonds for their redemption by raising annually a sum which shall produce an amount equal to the sum of the principal and interest of said bonds at their maturity.

(*e*) All certificates of indebtedness or revenue bonds issued in anticipation of the collection of taxes which are not retired within five years after their date of issue, and bonds issued to provide for the supply of water, and any debt hereafter incurred by any portion or part of a city, if there shall be any such debt, shall be included in ascertaining the power of the city to become otherwise indebted.

[In 1905 an amendment to this paragraph was voted upon. It provides that, "Except that debts incurred by the City of New York after the first day of January, 1904, to provide for the supply of water shall not be so included."

(*f*) Whenever, hereafter, the boundaries of any city shall become the same as those of a county, the power of the county to become indebted shall cease, but the debt of the county at that time existing shall not be included as part of the city debt. [This paragraph was changed at the November election by amendment to read: "Whenever the boundaries of any city are the same as those of a county, or when any city shall include within its boundaries more than one county, the power of any county wholly included within such city to become indebted shall cease; but the debt of the county heretofore existing shall not, for the purposes of this section, be reckoned as a part of the city debt."]

(*g*) The amount hereafter to be raised by tax for county or city purposes, in any county containing a city of over 100,000 inhabitants, or any such city of this State, in addition to providing for the principal and interest of existing debt, shall not, in the aggregate, exceed, in any one year, 2 per cent. of the assessed valuation of the real and personal estate of such county or city, to be ascertained as prescribed in this section in respect to county or city debt.

The New York Court of Appeals (1806) ruled that the sinking fund is not a part of the city debt, within the meaning of the provision of the Constitution limiting the creation of debt to 10 per cent. of the assessed valuation of the real estate.

Towns and villages are governed by general or special statutes in the matter of debt-making.

The Constitution also provides that certain State and city bonds are exempt from taxation, and an act has also been passed "for the protection of *bona fide* purchasers and holders of coupon bonds and of municipal corporations against malfeasance, misfeasance, or negligence of public officers."

STATE OF NORTH CAROLINA.

Constitutional Limitations.—There is no lim.tation by the State Constitution to the creation of debt. The charters of some municipalities, however, provide that debt shall be created only by a vote of the people.

STATE OF NORTH DAKOTA.

Constitutional Limitations.—The State may, to meet casual deficits or failures in the revenue, contract debts to an amount not exceeding $200,000 (in addition to the debt assumed at the time of admission into the Union).

The debt of any county, city, town, or other subdivision of the State shall never exceed 3 per cent. of the assessed valuation; but it is provided that any incorporated city may, by a two-thirds vote, increase such indebtedness to 8 per cent. of assessed valuation, and it is further provided that any incorporated city may become indebted to an amount not exceeding 4 per cent. on such assessed value, without regard to existing indebtedness, for the purpose of constructing water works and sewers. Provision must be made for the collection of an annual tax sufficient to pay principal and interest of such debts as they fall due.

STATE OF OHIO.

Constitutional Limitations.—The Constitution prohibits the loaning of the credit of the State, or of any municipal corporation, or subdivision of it, to or in aid of any person or corporation; prohibits the State, or any of its subdivisions, from becoming a stockholder or in any way interested in any joint stock company. The State is prohibited from assuming the debts of any county, city, township, or corporation, unless created to repel invasion, suppress insurrection, or defend the State in war; and also from contracting any debt for purposes of internal improvement. For the purpose of supplying casual deficiencies in the revenues, or to meet expenses not otherwise provided for, the State may contract debts to an amount, in the aggregate, not exceeding $750,000, and can only exceed that sum in case of invasion, insurrection, or war, or to redeem existing indebtedness.

The Constitution directs the enactment of laws limiting municipal indebtedness. Article XIII., Section 6, providing that: "The General Assembly shall provide for the organization of cities and incorporated villages by general laws, and restrict their powers of taxation, assessment, borrowing money, contracting debts, and loaning their credit, so as to prevent the abuse of power." In pursuance of this section there has been enacted a classification of the cities of the State; but as yet there has not been any general law passed limiting indebtedness.

STATE OF OREGON.

Constitutional Limitations.—The State, or any subdivision of it, is prohibited from loaning its money or credit to or in behalf of, any joint stock company, corporation, or association, or becoming a stockholder, or in any way interested in such company; and the State is prohibited from assuming

the debts of any county, town, or other corporation, unless such debts have been created to repel invasion, suppress insurrection, or defend the State in war. Acts of the Legislative Assembly, incorporating towns and cities shall restrict their powers of taxation, borrowing money, contracting debts, and loaning their credit. There are no general provisions relating to the issue of municipal bonds. They are issued, when necessary, under the charter provision of the various cities or under special acts. The several counties have indebtedness of from $10,000 to $100,000, and some of them even more. They do not issue bonds, but the county courts audit the claims and issue warrants showing that they are indebted to the people who have rendered services or furnished supplies

STATE OF PENNSYLVANIA.

Constitutional Limitations.—The Constitution names the debt limits of the State and municipalities. The regulations governing State indebtedness are to be found in Sections 4, 5, 6, 11, 12, 13, and 14 of Article IX. of the Constitution.

On the question of municipal indebtedness, Article IX., Section 7, says: The General Assembly shall not authorize any county, city, borough, township, or incorporated district to become a stockholder in any company, association, or corporation, or to obtain or appropriate money for, or to loan credit to, any corporation, association, institution, or individual.

Section 8. The debt of any county, city, borough, township, school district, or other municipality or incorporated district, except as herein provided, shall never exceed 7 per cent. upon the assessed value of the taxable property therein, nor shall any such municipality or district incur any new debt, or increase its indebtedness to an amount exceeding 2 per cent. upon such assessed valuation of property, without the assent of the electors thereof at a public election in such manner as shall be provided by law; but any city the debt of which now exceeds 7 per cent. of such assessed valuation may be authorized by law to increase the same 3 per cent., in the aggregate, at any one time, upon such valuation.

Section 10. Any county, township, school district, or other municipality incurring any indebtedness shall, at or before the time of so doing, provide for the collection of an annual tax sufficient to pay the interest, and also the principal thereof, within thirty years.

There are also regulations governing debt-making by school districts and road supervisors.

STATE OF RHODE ISLAND.

Constitutional Limitations.—The debt of the State is strictly limited to $50,000 except in time of war, or in case of insurrection or invasion, and any increase over that limit must have the express consent of the people; and without such consent the State is also prohibited from pledging its faith for the payment of the obligations of others. The assent of two-thirds of the members of each house of the General Assembly must be had to every bill appropriating the public money or property for local or private purposes.

There is no constitutional limitation of municipal indebtedness. In 1878, it was enacted that "No town shall incur any debt in excess of 3 per cent. of the taxable property of such town, including the indebtedness of such town on the 10th day of April, 1878; but the giving of a new note or bond for the pre-existing debt, or for money borrowed and applied to the payment of such pre-existing debt, is excepted from the provisions of this section, and the amount of any sinking fund shall be deducted in computing such indebtedness."

STATE OF SOUTH CAROLINA.

Constitutional Limitations.—There is no Constitutional limitation or general statute. The charter of Charleston provides that the bonded indebtedness shall not be increased unless the new debt shall receive the approval of two-thirds of the citizens at a popular election, which election must be called by a two-thirds vote of the City Council and the State Legislature.

STATE OF SOUTH DAKOTA.

Constitutional Limitations.—The Constitution prohibits the State, or any subdivision of it, from loaning its money or credit to any person or company, or becoming in any way interested in any corporation; and prohibits the State from assuming the debts of others, unless such debts shall have been incurred in time of war in defense of the State, or of engaging in works of internal improvement. The debt-making power of the State is strictly limited to $100,000 (in addition to the territorial debt assumed by the State), and such limit cannot be exceeded in case of war, rebellion, or insurrection. The debts of municipalities must be limited to 5 per cent. of assessed valuation, and provision must be made for a tax sufficient to meet principal and interest as they fall due.

STATE OF TEXAS.

Constitutional Limitations.—The Constitution (1876) prohibits the loaning of the credit of the State, or of any of its subdivisions, to, or in aid of, any person, association, or corporation, municipal or otherwise, or of subscribing to the capital stock of, or becoming in any way interested in, any private corporation. To meet casual deficiencies in the revenue, the State may become indebted to an amount not exceeding, in the aggregate, $20,000. Municipalities bordering on the coast of the Gulf of Mexico may, by a two-thirds vote of the taxpayers, issue bonds for the construction of sea-walls, breakwaters, and for sanitary purposes authorized by law. But no debt shall be incurred unless provision is made for an annual tax sufficient to pay the interest and create a sinking fund of at least 2 per cent. Municipalities are also authorized, by acts of the Legislature, to issue bonds for various purposes, such as erecting a court-house or jail, purchasing or constructing bridges, funding outstanding bonds, or, in the case of Gulf cities, to "improve harbors or remove bars at the entrance thereof."

STATE OF UTAH.

Constitutional Limitations.—The debt of Utah is limited by its Constitution. The indebtedness of municipal corporations is provided for in Article XIV. as follows: Section 3. No debt in excess of the taxes for the current year shall be created by any county or subdivision thereof, or by any school district therein, or by any city, town, or village, or any subdivision thereof in this State; unless the proposition to create such debt shall have been submitted to a vote of such qualified directors as shall have paid a property tax therein the year preceding such election, and a majority of those voting thereon shall have voted in favor of incurring such debt.

Section 4. When authorized to create indebtedness as provided in Section 3 of this Article, no county shall become indebted to an amount, including existing indebtedness, exceeding 2 per cent. No city, town, school district, or other municipal corporation, shall become indebted to an amount, including existing indebtedness, exceeding 4 per cent. of the value of the taxable property therein, the value to be ascertained by the last assessment for State and

county purposes previous to the incurring of such indebtedness, except that in incorporated cities the assessment shall be taken from the last assessment for city purposes; *provided*, that no part of the indebtedness allowed in this section shall be incurred for other than strictly county, city, town, or school district purposes. *Provided, further*, that any city or town, when authorized, as provided in Section 3 of this Article, may be allowed to incur a larger indebtedness, not exceeding 4 per cent, additional, for supplying such city or town with water, artificial lights, or sewers, when the works for supplying such water, light, and sewers shall be owned and controlled by the municipality.

The indebtedness of school districts is limited to 4 per cent. of the assessed valuation of property.

STATE OF VERMONT.

Constitutional Limitations.—A general limit to the debt-creating power of municipalities does not appear in the Constitution or statutes of the State. The Legislature authorizes the various municipalities to create debt for improvements of a public character. Railroad subscriptions by towns are authorized under certain conditions.

STATE OF VIRGINIA.

Constitutional Limitations.—The only limitation of municipal indebtedness in this State is found in the local charters. In several cases the limitation is 20 per cent. of assessed valuation of the municipality.

STATE OF WASHINGTON.

Constitutional Limitations.—The Constitution (1889) limits the debt of the State to $400,000, "to meet casual deficits in the revenues or for expenses not provided for," except in case of war, invasion, etc., when that limit may be exceeded. All other debts are prohibited unless authorized by law for some single work or object, to be distinctly specified, and the law must provide ways and means, exclusive of loans, for the payment of the interest as it falls due and to discharge the principal within twenty years; and such law shall not take effect until it shall, at a general election, have received a majority vote of the people cast in its favor. Neither the State nor any subdivision of it shall give or loan its credit to, or in aid of, any individual, association, or corporation, or become in any way interested in any company.

The section dealing directly with municipal indebtedness is given in full: "No county, city, town, school district, or other municipal corporation shall, for any purpose, become indebted in any manner to an amount exceeding 1½ per cent. of the taxable property in such county, city, town, school district, or other municipal corporation, without the assent of three-fifths of the voters therein, voting at an election to be held for that purpose, nor in any case requiring such assent shall the total indeptedness at any time exceed 5 per cent. of the value of taxable property therein, to be ascertained by the last assessment for State and county purposes previous to the incurring of such indebtedness, except that in incorporated cities the assessment shall be taken from the last assessment for city purpose; *provided*, that no part of the indebtedness allowed in this section shall be incurred for any purpose other than strictly county, city, town, school district, or other municipal purposes; *provided, further*, that any city or town, with such assent, may be allowed to become indebted to a larger amount, but not to exceed 5 per cent. additional, for supplying such city or town with water, artificial light, and sewers, when the works for supplying such water, light, and sewers shall be owned and controlled by the municipality."

STATE OF WEST VIRGINIA.

Constitutional Limitations.—The State Constitution prohibits the creation of any debt, except in an emergency such as an invasion or rebellion. The State of Virginia, in the readjustment of its debt, set apart one-third, or $15,239,371, as West Virginia's share. West Virginia claims that her share of the debt is a very much smaller sum, and so the matter remains unadjusted. No floating debt.

STATE OF WISCONSIN.

Constitutional Limitations.—The debt-making power of the State is carefully safeguarded by the Constitution. The sections covering the subject—3, 4, 6, 7, 9, and 10 of Article VIII.—are reproduced in full as follows:

Section 3. *Credit of State, for What Not Given.*—The credit of the State shall never be given or loaned in aid of any individual, association, or corporation.

Section 4. *Contracting Debts.*—The State shall never contract any public debt, except in the cases and manner herein provided.

Section 6. *Limitation on Public Debt.*—For the purpose of defraying extraordinary expenditures, the State may contract puplic debts (but such debts shall never, in the aggregate, exceed $100,000). Every such debt shall be authorized by law for some purpose or purposes to be distinctly specified therein; and a vote of a majority of all the members elected to each house, to be taken by yeas and nays, shall be necessary to the passage of such law, and every such law shall provide for levying an annual tax sufficient to pay the annual interest of such debt, and the principal, within five years from the passage of such law, and shall specially appropriate the proceeds of such taxes to the payment of such principal and interest.

Section 7. *When State May Borrow Money.*—The Legislature may also borrow money to repel invasion, suppress insurrection, and defend the State in time of war.

Section 9. *Evidence of Debt.*—No scrip, certificate, or other evidence of the State debt whatsoever shall be issued, except for such debts as are authorized by the 6th and 7th Sections of this Article.

Section 10. *Internal Improvements—Avails of Grants.*—The State shall never contract any debt for works of internal improvements, or be a party in carrying on such works; but whenever grants of land or other property shall have been made to the State, especially dedicated by the grant to works of internal improvement, the State may carry on such particular works, and may pledge or appropriate the revenues derived from such works in aid of their completion.

Municipal debts are limited by the following amendment, adopted in 1874: "No county, city, town, village, school district, or other municipal corporation shall be allowed to become indebted in any manner, or for any purpose, to an amount, including existing indebtedness, in the aggregate exceeding 5 per cent. on the value of the taxable property therein, to be ascertained by the last assessment for State and county taxes previous to the incurring of such indebtedness. Any county, city, town, village, school district, or other municipal corporation incurring any indebtedness as aforesaid shall, before or at the time of doing so, provide for the collection of a direct annual tax sufficient to pay the interest on such debt as it falls due, and also to pay and discharge the principal thereof within twenty years from the time of contracting the same.

STATE OF WYOMING.

Constitutional Limitations.—The Constitution limits the debts of the State to 1 per cent. of the assessed value of taxable property, and no debt of any kind can be created without the consent of the people, except in case of war, insurrection, or rebellion. The loaning of the credit of the State, except for the necessary support of the poor, is strictly prohibited, and the State can-

not become in any way interested in any corporation, nor can she, without the authority of a two-thirds vote of the people, engage in any work of internal improvement. Finally, it is provided that no bond or other evidence of State indebtedness is valid unless the same shall have indorsed thereon a certificate signed by the Auditor and the Secretary of the State, that it is issued in pursuance of law and is within the debt limit.

With reference to municipal indebtedness, the Constitution directs that: "No county in the State of Wyoming shall in any manner create any indebtedness exceeding 2 per cent. of the assessed value of taxable property in such county, as shown by the last general assessment preceding; *provided, however*, that any county, city, town, village, or other subdivision thereof, in the State of Wyoming may bond its public debt, existing at the time of the adoption of this Constitution, in any sum not exceeding 4 per cent. on the assessed valuation of taxable property in such county, city, town, village, or other subdivision, as shown by the last general assessment for taxation. No debt in excess of the taxes for the current year shall, in any manner, be created by any county, or subdivision thereof, or any city, town, or village, or any subdivision thereof, or any subdivision of any couny of the State of Wyoming, shall in any manner create any indebtedness exceeding 2 per cent. on the assessed value of the taxable property therein; *provided, however*, that any city, town, or village may be authorized to create any additional indebtedness, not exceeding 4 per cent. on the assessed value of the taxable property therein, as shown by the last preceding general assessment, for purposes of building sewerage therein. Debts contracted for supplying water to such city or town are excepted from the operation of this section.

PART III

Railroad Bonds

Bond Buyers.—An underwriter, according to *The Wall Street Journal*, says: "New York investors are the most conservative bond buyers in the United States, with the possible exception of the New England clientele. The East does not take, with any degree of avidity, to the class of bonds that might be called pioneer ventures. The average Eastern investor wants a bond with a wide market. He likes listed securities that show at least $25,000 a week on the Exchange. He will buy the sterling bonds of New York Central, Pennsylvania, Northwestern, and all the other standard railways, and considers that he is getting into speculative securities when he gets 4½ per cent. on his money.

"This class of investors furnishes the substantial rock upon which the American investment structure is reared. Without him, the investment world could hardly exist: but he is not the whole investment world.

"The West and our foreign friends are very different. Investors of the Western cities will take the bonds of local industrial and railway enterprises, and will expect to get on their

investment 5 per cent. or better. They figure that they are on the ground, and can watch for unfavorable developments, and stand from under if these occur. They think, therefore, that they are justified in taking more risk in their investments than the average Eastern investor would consider politic.

"The foreign investor reaches the same result and conclusion by an entirely different process of reasoning. The foreigners know that they have taken the cream from the American railway securities for the past forty years. They bought the bonds of St. Paul, Rock Island, Northwestern, Great Northern, and other similar lines when these bonds were selling to yield 4½ to 6 per cent. or better. Those who held the bonds of roads that went into receivers' hands, found that they, too, nearly always made good by staying with their investment. To the real old line English investor American railroad-receiverships have little terror. He holds underlying bonds protected by a mass of junior bond issues. When the junior issues are foreclosed he lies back and asks for his money, and he nearly always gets it in full. A receivership for the average American road has come to mean to the majority of European investors merely the cashing in of their claims on the property.

"These people are still willing to take prior lien risks on properties that promise to be great. They will take bonds like the Western Pacific 5 per cent. issue, the new Colorado & Southern 4½ per cent. bond, and even the small issues on various lines building or projected in the far Northwest. They will buy these at a discount, because they count on prior lien bonds going to par at least, if the road makes good. They do not invest blindly, and a great name on the directorate has more force with them than a glowing prospectus.

"They and the Western buyers are the people who are discounting our future prosperity. If the prosperity pans out, they will be tbe people who will take the greatest profit from it."

Bond Coupons.—This is a certificate of interest attached to a transferable bond, whereby the bond-maker agrees to pay the bearer the amount of specified interest due on the bond at a specified date and place. When the interest is due the coupon is cut from the bond and presented for payment at the place designated, and payment is made to bearer. Bankers and trust companies usually collect coupons for customers and depositors without charge. Coupons usually are attached to bonds payable to bearer; but the principal of a bond, in most cases, may be registered, thereby insuring safety from loss, and the interest paid by means of coupons; or the bonds may, in many cases, be exchanged for registered bonds.

Bond Denominations.—The favorite amount is $1,000, although there are many issued in denominations of $100, $500, $5,000, etc.

Bonds, Description of Railroad.—Each bond is made payable to the bearer at a fixed future date, without deduction for any tax or taxes under any present or future law of the United States, or of any State, county, or municipality thereof. Each bond also recites that it is one of a series of certain number, issued under and equally secured by a mortgage, to which reference is made as to the nature and extent of the security, the rights of the holder, and the terms and conditions upon which the bonds are issued. Attached to the bond are a number of coupons, representing the semi-annual interest payments, redeemable one at each interest-paying period, from the date of issue to the maturity of the bond. On the reverse side of the bond is a blank form, provided for the purpose of registering the name of holder, which, when filled in and signed by the registrar, constitutes it a registered bond, payable only to the specified holder, though the coupons are still payable to the bearer. The bonds are signed, sealed, and delivered to the trustee, who ascertains that they are all in order and certifies each bond as being one of the number named in and covered by the said mortgage. For the certification the public is indebted to the New York Stock Exchange, which made it a rule some years ago that all bonds dealt in by its members must bear this certificate signed by the trustee. This was done to protect the bondholders from an over-issue, the result of which would mean loss to the holder of any bonds issued in excess of the legal number or amount. The bonds, now in negotiable shape, are returned to the company, which is then at liberty to dispose of them by sale or otherwise.

Bonds, Early Railroad.—In the earlier days of the railroads, when bond issues were not such every-day occurrences, the roads usually contented themselves with a limited number of issues, and a glance at the titles of the bonds was sufficient to establish their status in one's mind, they being generally created as first, second, third, or fourth mortgage bonds. That was before the advent of consolidations, reorganization committees, and the like, and makes a sharp contrast when compared with the Pennsylvania system's two hundred and three security issues, each with its individual rank and characteristics. There is a tendency to-day, on the part of the larger roads, to gradually reduce the variety of their issues by providing for a general or consolidated bond, secured by a blanket mortgage covering

their entire property, whether now owned or hereafter to be acquired, subject, of course, to prior liens, and designed to be issued in lieu of said prior lien bonds as they become due; also to pay for future extensions and acquisitions, and to discharge any existing obligations of other roads purchased or absorbed at not more than a certain rate per mile on such extensions or acquisitions.

Bond, Evolution of the Railroad. — The investor who, in the later sixties and early seventies, during the period which immediately succeeded the Civil War, looked to the market for the purchase of railroad bonds found those securities, as a rule, represented by a simple and uniform type, says *The Railroad Gazette*. Here and there could be discovered an "income" on a second mortgage bond or a like junior security. But the rule was the first mortgage; and in the eye of the average investor that mortgage was analogous to a realty first mortgage, if for no other reason, because the stock was apt, in those days, to be paid in on the mortgaged road, and thus an equity of redemption—as in the common case of mortgaged realty—nominally at least, was created.

For, during the fever of railroad construction following the war which led to the financial panic of 1873, railroads, though built very unwisely, were, with a few noteworthy exceptions, built honestly, and even the proceeds of municipal subscriptions went into the enterprise. The common high-rate first mortgage railroad bond of the period was nominally well secured, and came into frequent trouble later simply because the project upon which it was based was fundamentally rash, did not find the expected traffic, and, in the metaphor of the time, often resolved itself into "two streaks of iron rust and a right of way."

With the panic of 1873, followed by the "long drag" and bitter financial stress through about five years following, the railroad bond enters a new and more varied phase. Old stock and junior bonds—often senior bonds, too—disappear as the first company is snuffed out by foreclosure and reorganization; and the attempt, usually successful, to rehabilitate staggering railroad properties and at the same time "recognize" interests, launches a new set of junior mortgage securities.

Now begins to appear more familiarly the "equipment," the second and third mortgages, and even the "debenture," a term mainly borrowed from England, and not so much a bond as a railroad note of hand. It is a period of reconstruction rather than construction, with the "purchase money" bond, or its equivalent, under another name in the foreground. There is

in terms of time no sharp line of demarcation for the period, but it draws to its close in the late eighties.

One of the most characteristic traits of the second period of evolution is the fall of the interest return on the high first mortgage railroad investments. The old seven and sixes, if well secured, and with a decade or more to run, command a high premium, and, if refunded, carry but 5, or even 4, per cent. The railroad bond has entered the second period of its evolution, and, where the panic of 1873 found that security in only two or three distinct types, the investor of ten years later finds it in half a dozen.

Finally the railroad bond reaches its third stage of evolution, coming down to to-day, and a period much more interesting as well as prolific, covering roughly some fifteen years. The junior bonds of the second period were differentiated into new forms. In the tertiary period railroad properties have waxed, consolidations and "holdings" companies come in, and "high finance" greets us. As a result we find "general" mortgages of two or three grades: "blanket" mortgages laid on other blankets; "A," "B," and "C" series of outlying securities; the free silver issue of 1896 emphasizing the gold bond; the "consolidation" bond, extremely common and its best secured type made a savings-bank investment in some conservative States.

One great railroad company alone shows us twelve series of debentures. There are "income" bonds, accumulating and non-accumulating; "prior liens," in which the adjective may be either absolute or relative, and a mighty host of the "collateral trust" species of all degrees of security. The grandfatherly old first mortgage of the past war period is himself almost extinct, but his grandchildren are many, have forms and names not a few, and still wax and multiply.

In theory the financial critic would say that a process of evolution which has so tremendously expanded the kinds, the grades, and the total volume of railroad bonds, and, in a sense, forced the bond of to-day into the category of the railroad stock of a third of a century ago, would also imply that the average railroad bond is much more speculative now than then. But the reverse is probably true. In the first place, while the volume of bonds has been vastly augmented, so has the producing power in net earnings of the railroads—the security. Again, and more important, is the fact that along with the evolution of the railroad bond has come an evolution of the judgment of "the street" as well as of the individual investor. Both have been educated by experience and both apply to the railroad bond more accurate and searching tests of value. The bond which can establish and hold in our times a high or even

fair quotation in the market has to run a sharp gantlet, individual and personal, as some of the underwriters have found out.

Yet another qualifying force is the fact that the strong railroad corporation, with its best senior bonds carrying a 3½ per cent. rate and its juniors not more than 4 per cent., shoulders a doubled bonded debt almost as easily as it carried its original 7 and 6 per cent. mortgages. While, therefore, no hard and fast rule can be laid down and plenty of railroad bonds are of the speculative class, the average bond, as evolved during thirty-five years, has diminished rather than increased its margin of fiscal risk. It follows, also, that as a criterion of the condition of the market, and representing investment rather than speculation, the bond leaves the fluctuating stock list far behind. When the street was troubled a few months ago by the long and continuous fall, reaching 30 or 40 points in shares of dividend-paying roads, conservative minds were less disquieted when they saw the underlying strength of senior and junior bonds, which fell in most cases only from 2 to 5 points each and have since almost or quite recovered.

There remains to be considered, briefly, the large volume of street railway bonds thrown on the market since the enormous expansion of electric lines which began some fifteen years ago. Here history, in part, has already repeated itself. The street railway companies, like the steam railroad companies of the later sixties, have started with first mortgage bonds almost exclusively which have not yet evolved much into junior liens. But, unlike the original steam roads, the bonds have in very many cases had small equity, or no equity at all in cash stock. In theory, again, such financing ought to have resulted in just such a calamity as overtook, in the autumn of 1873, the too excessive building of steam roads; but the electric roads have thus far been saved, and probably will, as a whole, prosper by the unforeseen popularity of the new motive power. It will be interesting now to see, as the years pass, whether the electric railway bond follows the same process of evolution and subdivision as that of the steam corporations. It will probably do so unless a grander evolution reaches both the electric and steam roads, and merge them in one.

Bonds for Women.—A correspondent writes: "A woman who has just received $15,000 life insurance money asks how to invest it. This is all the money she has, and she needs the largest income compatible with safety. What would you advise buying?"

The principle involved in this case is not at all uncommon.

Most small investors want a maximum return and maximum safety. The two are incompatible. If this investor had money enough to be able to live on a return of about 3¾ per cent., we should advise buying the best class of railway bond returning between 3.40 and 4 per cent.

As it is, we think bonds returning about 4½ per cent. should be chosen, taking those which are good and which have chance of appreciation, but where there is not much likelihood of loss.

Bond Forms.—There are three recognized forms—coupon bonds, wholly registered, and registered only as to principal.

Bonds in Savings-Banks.—During the four years from 1900 to 1904 the capital stock per mile outstanding of American railroad companies remained almost stationary, and increased only from $30,205 per mile to $30,686 per mile. During the same four years the outstanding bonds of the same corporations increased from $29,967 per mile to $35,418 per mile, or about 18 per cent. This is conclusive proof of an existing "bond period" in railroad financing. In connection with it the matter of the various absorbents of railroad bonds, new and old, is an interesting and fruitful study. Of its many branches, some of them vague and speculative, others visible and determinate, none is more suggestive than the increase of savings-bank investment in railroad bonds. As an illustration of the drift of savings-bank investment toward railroad bonds, says the *Railroad Gazette*, let us take the latest returns during two years, from New York State and from the three larger States of New England. In 1902, the total resources of the savings-banks of the State of New York were $1,191,331,573, of which $151,991,779 was invested in railroad bonds. Corresponding figures for 1903 were $1,238,800,468 and $177,444,223; and for 1904 they were $1,311,993,505 and $196,982,385. Using approximate figures, while the total resources of the New York savings-banks increased during the two years $120,662,932, or about 10 per cent., the railroad bond holdings increased $44,990,606, or almost 30 per cent. Massachusetts savings-banks had, in 1902, resources of $627,959,337 and $93,943,176 in railroad bonds; in 1903 they had $649,437,662 resources and $102,214,285 in railroad bonds; and in 1904 they had $674,644,990 resources and $113,510,243 in railroad bonds. During the two years resources increased somewhat more than 7 per cent., while railroad-bond investments increased more than 21 per cent., and, if we were to add street railway bonds, more than 27 per cent. The $82,741,563 savings-bank resources of Maine in 1904, and their $35,123,560 of railroad bond investments, show an increase for the two years

of about 6 per cent. and about 21 per cent., respectively. Corresponding figures for Connecticut are $233,055,954 resources, $82,265,024 railroad bonds, and increases for the two years of about 9 per cent. and somewhat more than 18 per cent., respectively—the latter percentage likely to be increased considerably, now that large groups of street-railway bonds in the State have been opened to savings-bank purchase by recent legislation.

Taking New York State and the three leading New England States together, the showing for 1902 is $2,112,046,622, and for 1904 it is $2,302,436,014, or an increase of resources of about 9 per cent. in two years, while railroad-bond investments for the same period grow from $344,337,720 to $427,881,212, or about 24 per cent., railroad bonds held thus increasing more than two and a half times as rapidly as resources. The last computations give comparisons on a great scale, and include probably about two-thirds of all the savings-bank assets of the United States, which may be estimated roughly at about $3,400,000,000. It should be said, by way of mild qualification, that some of the States return railroad stocks and bonds together; but the amount of stocks held is so relatively small that it may be ignored. The total of outstanding railroad bonds in the whole country is returned as $6,932,996,651. Allowing for private savings-banks in the West and South, returns from which are very defective, the total amount of railroad bonds held by American savings-banks is probably about $600,000,000, or, say, 9 per cent. of all bonds outstanding. But the influence of the savings-banks as absorbents of railroad bonds goes much further. In some States—Connecticut, for example—the same law of investment applies to individual trustees as to the savings-banks. How far such laws tend to further absorption of railroad bonds can only be guessed at, but it must be a very potential "digestive" force.

As we depart from the actual figures showing how swiftly railroad bonds are passing to the savings-banks, the subject broadens outward in several radiants. Thus the investment returns on municipal bonds and on realty mortgages has, on the whole, during the last few years, fallen lower proportionately than on first-class railroad bonds. The relative annual return may be perhaps fixed as about 3.50 per cent. on municipal bonds of high degree, and 3.70 per cent. on railroad bonds of the same general grade. This undoubtedly has shifted savings-bank money from municipal into railroad securities. But a more important factor is the extension of State law-making so as to include railroad bonds formerly excluded—this largely as a result of higher railroad credit and such fiscal operations as the refunding of old issues, usually first mortgages—into "consoli-

dated" mortgage bonds issued on a pretty big scale. Naturally this has resulted in lobby work to induce legislatures to admit new issues to the "legal" savings-bank lists; and therein lies a very appreciable danger, of which State law-makers should beware. Another trend, worth its passing attention, is the tendency of legislatures more and more to open the securities of roads within the State—a good tendency, inasmuch as it may tend to investment in railroad bonds that are more immediately under the savings-bank manager's eye, but somewhat perilous in that local favoritism may be pushed too far.

Another branch of this "localization" and of the amplified subject is the legalizing of the street railway bonds for savings bank purchase, now that the street railway has become in so many cases a property outside of speculative investment and venture. Thus, during the first year,—apparently 1903,—when street railway bonds were opened under certain restrictions, to the Massachusetts savings-banks, $3,769,594 were taken in that class of security, and in 1904 the amount had risen to $6,324,370, an increase of about 70 per cent. In 1904, some thirty electric railway companies of the State had been approved by the Massachusetts Savings-Bank Commissioners and their bonds placed on the "admitted" list. Maine admits the bonds of any street railway in the State and first mortgage bonds of street railways in certain other States, and New Hampshire, with restrictions, follows the same rule. Other Eastern States, under more general statutes of investment, are even more liberal. Vermont appears to be unique and isolated in excluding both railroad and railway bonds of all kinds. In Connecticut, which adopts, in the matter of street railway bonds, the "local" idea, is presented the anomaly of savings-bank legalization of certain junior street railway bonds, while certain underlying senior bonds of constituent railway corporations have been left under the ban.

Bond Market Changes.—A conservative bond house, in 1905, issued a circular containing a reprint of a circular issued by the firm in January, 1897, offering nine steam railroad bonds, yielding from 5½ to 7 per cent., and reciting the history of those bonds in the past eight years. The bonds then offered by the firm have since risen from 15 to 34 per cent., having meanwhile regularly paid their interest. The list shows an average advance of 20 per cent. and an average annual rate of interest of over 6 per cent. in eight years.

The circular says: "While it is not possible to-day to get from 5¾ to 7 per cent. on safe railroad bonds, we can still recommend bonds paying 5 per cent. on the investment, and we have

very little doubt that such bonds, purchased to-day, will show, ten years hence, a very handsome enhancement in value.

"At present a great many 5 per cent. bonds of gas, electric light, and traction companies are offered in the neighborhood of par. Many of these bonds are undoubtedly good, but we do not think they compare in any way with first mortgage bonds of a steam railroad."

The circular then pointed out that, while information about steam railroad bonds and earnings can be obtained from the Interstate Commerce Commission report and various State Commission reports, *Poor's Manual*, etc., information about gas and electric light companies is very seldom available in quantity. Steam railroad charters are perpetual, while charters of gas, electric light, and trolley companies are generally limited, and sinking funds are not usually provided. Small steam railroads are generally absorbed sooner or later by a large system, which means an advance in the prices of the bonds, which bonds generally have a long time to run, without privilege or redemption. Bonds of gas, electric light, and trolley companies are frequently redeemable at a small premium. Steam railroads can usually be relied upon to show steady increase in the earnings with the growth of the country, while municipal utility corporations are vulnerable, owing to legal legislation and political agitation. Lastly, the cost and science of operating steam railroads has become reasonably permanent and well understood, while the cost of operating public utilities varies greatly with local conditions.

Bonds, Panic.—Are Government bonds better than the best class of gilt-edge railroad bonds in a time of panic? The question, says *The Wall Street Journal*, is one that is somewhat difficult to answer. As casting some light upon it, we cite high and low prices for some representative gilt-edge railroad bonds and for the Government issues in 1893. That year was a year of panic. The silver question, the Reading receivership, the National Cordage receivership, the failure of S. V. White, tremendous gold exports, rise of call money to 74 per cent., and many other similar catastrophes made the year perhaps the blackest in the history of the New York Stock Exchange. It is therefore pertinent to cite statistics from that year in reply to the query propounded. The statistics show as follows:

	High.	*Low.*
Ch. & Northwestern cons. 7%	138	126
C. R. I. & P. 1st 6%	125	114
Morris & Essex 1st 7%	142	130
New York Central 1st 7%	124	116
Pennsylvania 1st 4½%	110½	102

	High.	Low.
Illinois Central 1st 4%	109½	104
N. Y., L. & W. 1st 6%	131	117½
Government.		
Coupon 4's	114	108
Registered 4's	114¼	107¾
Ext. 4½'s	99¾	95¼
Currency 6's	113½	108

The above tables, while they certainly cast some light upon the question, do not fully answer it. As a matter of fact, the record of 1893 shows that during the first part of that year there was some heavy selling in Government bonds. Up to the middle of the year gold exports had run nearly $62,000,000, and over 600 banks of various sorts had closed their doors. The panic of May brought very little selling of Government bonds, and the railroad list also held firm through this period. In June and July savings-banks and other investors threw great blocks of Government bonds on the market, nearly all of which were taken by national banks to use for circulation. The great number of bank failures also caused liquidation in Government bonds, and it was at this time that the low prices were reached in these securities.

During the same period the best of the gilt-edge railroad bonds showed decided weakness. There was more liquidation in even the highest class of these bonds than there was in the Government securities. In many gilt-edge issues the decline ran over twelve points, while in the next class of railroad securities, generally considered extremely conservative investments, the decline frequently ran as much as 20 per cent. There was no public demand for railroad bonds, and those who pressed them for sale invariably smashed the market.

From the above it is possible to say that there is a better market in moments of extreme panic for the Government issues than there is for even the best class of railroad bonds. There will not be by any means the same volume of liquidation. For every dollar of Government bonds thrown into a panic market there will be $100 of railroad bonds. The strong and solvent national banks at all times stand ready to take the Government issues. They are not so ready in time of panic to take even the finest of railroad bonds. Therefore, to reply to the direct question, Government bonds are undoubtedly the safest of all securities for the funds of savings-banks and similar institutions.

Bonds, Railroad.—Bonds are interest-bearing, negotiable instruments, and are a direct obligation of the maker. A railroad corporation wishing to raise funds to procure a right of way, purchase rolling stock, build road-beds or terminals, make

extensions or betterments, or provide for any other legitimate extraordinary expense, has recourse to an issue of bonds, the manner of creating which is about as follows: The stockholders, at a meeting, of which due legal notice has been given, and at which the holders of the required number of shares are represented in person or by proxy, by a resolution confer the necessary authority upon its board of directors to issue a certain amount of bonds, to be secured by a mortgage upon all or part of the company's property, any or all of which are to be issued by resolution of the said board. These resolutions are drawn up under the direction of the company's attorney, to insure the legality of the proceedings. The attorney then draws up a form of mortgage, which must conform with any provisions of the company's charter relating thereto, and must not conflict with any laws of the State in which the company is incorporated, or of the United States. As there is only one mortgage to be executed against the issue of a large number of bonds, it becomes necessary for the protection of the prospective bondholders to select a trustee to hold the mortgage, whose duty it is to see that all its provisions are faithfully carried out. This selection having been made, the mortgage is submitted to the trustee, which is invariably a trust company, and, if satisfactory to them, and is approved by their legal adviser, is duly executed, recorded, and filed with said trustee.

Bonds as Reserve.—A Wall Street house in 1905–1906 sent out a circular to 7,000 banks and trust companies, each having a capital of over $50,000, asking for opinions upon bonds as a safety reserve for banks.

Over 3,600 replies were received. These replies show a surprising tendency to invest in bonds, even in the West where many loans will pay as high as 10 per cent. High grade railway and municipal bonds are the favorites.

New England leads, and Texas buys less bonds than any other State. As high as 50 per cent. of reserve is carried in some Eastern banks in bonds, while from 5 per cent. to 10 per cent. is high in the Far West. The West prefers municipals. In the old States high-grade railway bonds are better liked. Nearly all bankers prefer the listed bonds.

Bond Reserves for Banks.—A bank, says Mr. Thomas F. Woodlock, discussing this subject, is a merchant in credit, borrowing from depositors credit for the most part payable on demand and lending to borrowers credit for the most part payable at a date. To secure the ultimate repayment of credit that it borrows in the form of deposits it keeps a certain amount of

capital and surplus as protection against bad loans. To secure prompt liquidation of depositors' claims, it keeps a certain proportion of deposits on hand in cash without employing it at interest. A bank is always theoretically liable to demands from its depositors at any moment to the full amount of their deposits, and consequently it must keep the funds of depositors so employed as to enable them to be quickly converted into cash, for cash is the only thing in which depositors' claims can be settled. A commercial bank consequently can never be regarded as an investor in the true sense of the word, for an investor is one who places out capital in a more or less permanent way, having special regard for yield of income thereon.

The resources of a bank, from the depositors' point of view, consist of cash unemployed and held as reserves and cash employed in loans or in securities. So-called "bond reserves" are a species of "hybrid" between cash employed and cash in reserve, partaking of the former because they represent money put out at interest and of the latter because—like a "call" loan—they are theoretically convertible at will into cash by sale of the securities. They are not, however, any more reserves in the true sense of the word than are "call" loans. To realize on "bond reserves" the securities must be sold in the market, which is also true of "call" loans, they being as to the large majority made on securities, and convertible in the last analysis only by sale of these securities.

The holding of bonds as "reserves" by banks generally is a growth of recent years, as is the practice of country banks lending directly on the New York money market both on call and on time, and on commercial paper and security collateral. It has now attained very large proportions, it being estimated that the total security holdings by institutions doing a regular business is well over $1,000,000,000. Country banks hold surprisingly large quantities of bonds of all kinds as employment for their money, especially where local commercial employment cannot be had for all a bank's funds. This has come to be the case very largely with banks in agricultural sections, owing to the great prosperity of the farmer. Inasmuch as a bank doing a commercial business cannot be regarded as an investor, and inasmuch as its resources must always be employed with an eye to their conversion into cash at short notice, it is clear that the prime requisite in "bond reserves" is convertibility into cash quickly and without loss. A bank doing a commercial business should hold no bonds which it cannot quickly sell for cash at or near cost or better.

A bond is an obligation to pay a fixed sum at a fixed date, with interest meanwhile at a fixed rate and regular dates of

payment. The exchange value or price of invested capital is measured by the income producing capacity actual and potential represented thereby, the potential income-producing capacity being an uncertain but often most important factor in the case of stocks whose dividends are not especially limited. This potential income-producing capacity gives what may be called a speculative value to stocks over and above their actual dividend return, which speculative value is frequently the controlling factor in the price equation. A bond, being a security of fixed return both as to ultimate principal payment and as to interest, is governed in the long run as to its price equation by two factors, viz., the general market value of money as expressed in the rates offered for its employment, and the security for principal and interest represented by the bond. Certain classes of bonds, however, enjoy a special demand for special reasons, as "savings-bank" bonds and bonds which are legal for "trustees," and thus places them in a special class. Nevertheless, their inclusion in this class is due to special security—real or imaginary—underlying them, thus giving them the requisites prescribed by law in the cases.

The true price of a bond is the income return it gives to the buyer who holds it to maturity, or, in other words, the "interest basis" upon which a bond sells. This "basis" is the measure of the bond's appreciation by investors taking into consideration the market rate of interest demanded by capital seeking employment and the character of employment represented by the bond. When the rate of interest borne by a bond of sufficiently high character is above the general market rate offered for capital, the bond sells at a premium on its face value. When the rate of interest borne by the bond is below the ruling rate, or the security is questionable, the bond sells at a discount on its face value. There are 4 per cent. bonds selling in the market below 80 and above 110, yielding from over 5 per cent. to 3½ per cent.—interest being punctually met on both extremes, the difference being mainly due to varying degrees of security. The security of a bond depends ultimately upon the amount and stability of earning capacity available for service of the bond. The true "yield" of a bond selling at a premium is, of course, less than its apparent yield, because it is necessary to set aside a part of the apparent yield to meet the ultimate loss of premium and interest on premium. A bond at maturity pays the holder its face value only. Conversely, the true yield of a "discount" bond is greater than its apparent yield. And here it may be pointed out that interest tables showing "yield" on either kind of bonds are always calculated upon the bond being held to maturity and upon reinvestment of a certain portion of the in-

terest semi-annually at the rate of the yield, this process being reckoned to provide for the premium at maturity. Consequently, the "yields" as given by these tables are most misleading, unless these conditions are observed—a thing that banks should remember when buying bonds on "yield." How, for instance, can a commercial bank liable to be liquidated almost without notice by its depositors, safely reckon on holding a long date high-premium bond to maturity, thereby securing the "yield" indicated by the tables?

Reverting to the prime requisite of convertibility in "bond reserves," this quality depends ultimately upon the number of buyers that can be found for a bond at short notice. This in turn depends upon the following (it being assumed that there is no immediate doubt as to security of interest and principal):

(*a*) A wide market.

(*b*) A rate of interest such that the bond shall sell at near or less than its face value.

(*c*) Some special quality in a bond giving it a speculative potentiality over and above its fixed income yield.

(*a*) A wide market depends mainly upon the amount of the issue. Very small issues of bonds cannot be known to a great many people, and for that reason are uncurrent. The more markets or exchanges a bond is quoted upon the more people are likely to know of it and be prepared to buy it when offered. It is a great advantage in a bond to have a real foreign market. Ceteris paribus, the larger the issue the wider and freer the market and the easier to buy and sell at slight changes in price.

(*b*) Bonds selling at or less than par, by their nature appeal to more classes of buyers than do bonds at high premiums. The average individual investor will not as a rule buy such bonds. This is especially true of the foreign investor nowadays. Bonds at a premium are largely limited in their market to real investment institutions such as insurance companies, and, in lesser degree, savings-banks, etc. A bond quoted at a discount needs no sinking fund. Moreover, such a bond always has the possibility of rising to par before maturity and profiting the holder, whereas a bond at a premium, whatever its merits, always has the certainty of falling to par at maturity and entailing loss on the holder who has not provided a proper sinking fund out of his income. The terms of a bond do not secure anything more than the face value at maturity.

(*c*) If a bond has any special quality giving it a potentiality of value beyond that resting simply on its interest yield and security of principal, this greatly widens the market and increases the number of possible buyers for it. A class of convertible bonds has sprung into existence in the last few years

when the holder can at will convert his bonds into stock of the issuing company. This has resulted in a class of bonds containing a special potentiality or equity. (Cf. U. P., Pa. Co., B. R. T., Erie Co., etc.) These bonds have always had an unrivaled market, and whenever they can be bought at a price which does not too heavily capitalize the special "equity" they are desirable for "bond reserves" because of this fact. (Instance Penna. 3½ (1915) on a 4 per cent. basis, B. R. T. 4's.)

On general principles, therefore, the best kind of bonds for a commercial bank's bond reserves are those which:

(*a*) Are part of a large issue and quoted in many markets.

(*b*) Sell at or below par.

(*c*) Possess equities or potentialities beyond fixed return of interest and repayment of principal at maturity.

The outlook to-day, however, is abnormal, as bearing upon the bond market and the value of capital invested at fixed yield. Interest rates are tending upward as a result of the increased production of gold, stimulating commodity prices, and the probability is that they will continue to tend upward until there has been a commercial panic, followed by general depression of trade.

This means that, as a whole, bond prices are tending downward, though active speculation is tending to advance stock prices and other forms of "equities." The downward tendency in bond prices will be felt most directly in gilt-edged issues which have had their full growth to absolute security, but will be at least partially offset in the case of bonds which have not attained but are attaining this growth, and will not show itself at all in bonds which have a potential feature. As high premium bonds are all in the gilt-edged class, another powerful argument is thus furnished against their use in "bond reserves," for apart from their imperfect convertibility they will be the first to fee' the effect of advancing interest rates. As bonds selling below par have for the most part possibilities for growth by reason of improving security, their relative desirability for "bond reserves" as compared with bonds at a premium is the greater by reason of rising interest rates. But best of all are the "convertible" bonds, because they will share to the full in the increased value given to equities by the stimulation resulting from the increased gold production and reparation of damage by the war.

Banks should carefully examine their "bond reserves" in the light of the above considerations, remembering always that these "reserves" will be most needed in a time of stringency, when the individual investor is the only one who can buy securities. Very heavy losses will be made in that day by the

bank which has to sell in a hurry a block of "high premium" bonds, or bonds which for one reason or another are uncurrent. Fearful havoc will be wrought among many bonds which have been bought on "yield" as per "interest tables" in the last few years.

Bonds, Savings-Bank.—How great is the actual benefit accruing to a bond issue from such classification? Does a bond appreciate 5 per cent. in value because it is known as a savings-bank security? While it is difficult to estimate the monetary value of such designation, bankers agree that the prestige derived by a bond as the result of its having been admitted to the savings-bank list was worth a great deal. This advantage does not consist so much in the fact that the bond was actually bought by the savings-bank, as, on account of its acceptability as a form of investment, to custodians of trust funds who always prefer securities endorsed by the New York State Savings-Bank Association.

An officer of an influential trust company says that a bond admitted to the savings-bank list might, at times, sell five points higher than an issue equally good not so endorsed. But it depended largely on the character of the bond and basic security behind it. He added: "The mere fact that a bond has been admitted to the savings-bank list does not necessarily create for it a broad market.

"While savings-bank bonds, in common with other securities to-day, sell relatively low, the savings-bank bond is always quoted higher than others. It has come to be a convenient matter for trustees to make investments in savings-bank bonds, because they know that they are unusually secure. In this way many custodians remotely located from investment centers have been able to place their funds without risk. At times, when bonds are selling high and the market it burdened by heavy accumulations of investment funds, the savings-bank bond always commands a good premium."

Bond Rates, Declining.—In these days (1906) of declining interest rates on standard securities, it is apropos to note that there are still forty-one different railway issues, representing $151,626,000 and bearing 7 per cent. interest, though the price at which those bonds are quoted makes them yield considerably less than the income stated. Within the next decade and a half these links between the past and present will be simply reminders of the time when credit was low—when the railways were compelled to offer inducements in order to get money for construction work. From 3 to 5 per cent. is about the range

of interest rates on railway issues of the present day. Something like $10,000,000 7's have been or will be liquidated during the present year.

Bonds that Puzzle Investors.—Some bond issues, says *The Wall Street Journal*, are almost impossible of analysis by the investor other than the bond expert.

The vital question in the mind of such inquiring investor is always:

"How close to the road is my bond?"

To answer that direct question in the case of a straight first mortgage bond is simple. To answer it in the case of a consolidated or general bond needs thought. To answer it in the case of a refunding, or blanket, issue needs more thought. To answer it in the case of collateral bonds and notes, needs the instinct of Sherlock Holmes.

To illustrate, the two- to five-year Southern Pacific bonds may be cited. They are a lien on a miscellaneous collection of eighteen stocks and fifteen bonds. Terminal companies, branch lines, sections of the main line, express companies, steamship companies, and equipment are represented. The $69,166,300 of stocks are not "close to the road" at all. They are valuable for their vote alone, in most cases.

The bonds are mostly first mortgage, being small parts of bigger issues. One exception is a Southern Pacific Company collateral bond, secured on Central Pacific stock. This is just as close to the road as is the stock collateral, and no closer.

Nothing more definite can be stated. If any innocent investor is puzzled, he has the satisfaction of knowing he is in good company. No reflection is cast on the bonds by this criticism. The collateral is undoubtedly worth much more than is the bond issue. The loss of this collateral would practically break up the control of the main line from New Orleans to San Francisco.

Another variety is found in the 'Frisco collateral 4½ per cent. notes. These are secured by all the stock of the St. Louis, San Francisco & New Orleans Railroad, and by $6,263,777 St. Louis & San Francisco, New Orleans Extension 4 per cent. bonds, which are again secured on the first mortgage bonds of the St. Louis, San Francisco & New Orleans Railroad, which are a direct lien on 232.74 miles of good railroads. In each case the entire issue of bonds is deposited as collateral.

When the investor looks at this note he thinks he is looking at something about four steps removed from a direct lien. When he goes further in his analysis, he finds that he holds the only outstanding lien on 232.74 miles of railroads. His issue of notes

is the only security held by the public which would get money out of the sale of this road in a receivership. All the others are in the hands of trustees, who would collect the debt, turn it over to the next trustee, until, finally, the trustees of this note would turn it over to the investor, who would probably be surprised to get it. The only difference would be that each trustee would want the usual fee.

Many other similar instances might be adduced, notably the Wabash, Pennsylvania, and other collateral note issues, which are secured, in whole or in part, on bonds.

Perhaps, in the long run, these piled-up issues will be cleared away. A good general mortgage can be made to cover a multitude of liens, good, bad, and indifferent. The public never will understand, and is not supposed to understand, these complicated liens. The "say-so" of the trusted banker is the best sauce with which to serve these financial viands. It does more to stimulate the public appetite than any other thing.

It must not be inferred that such liens are not good. In almost every case the lien is not only good, but is much better than the apparently more simple and direct lien of the consolidated or general bond. As pointed out above, for instance, the 'Frisco notes are an absolutely first lien, in effect, subject only to trustees' charges, which are regulated in the indentures in each case.

Nor may it be concluded that the financiers are unwise. They finance according to occasion. Undoubtedly, a 'Frisco note brings a better price than would a first mortgage on a new line in Louisiana, and it has the virtue of coming due in five years. It is probably wise finance. It is nearly always wise for a new line to issue securities near par, so that, in case a readjustment is advisable, the securities can be called without paying a big premium over the issue prices.

Bond Trade.—It is probable that more than 90 per cent. of the actual buying and selling of bonds is done, not on the Stock Exchange, but through the bond houses, where much closer prices are made on blocks of bonds passing from hand to hand without going through the Exchange.

Bond Values.—Bond dealers determine the value of a bond by the fundamental conditions surrounding its security and by the length of time the bond has to run and the rate of interest it pays. Bond dealers classify bonds on the basis of their yield or net income return. A bond selling above par does not return the buyer a net return as great as the rate of interest named in the bond; a bond selling below par yields more interest than

the rate named in the bond. Bond dealers, as a rule, advise buyers not to invest in high premium bonds, for the disposition of the individual investor would be to expend principal in the form of income. This, however, can be guarded against if the investor establishes a sinking fund, allotting part of his interest to his income account and part to a sinking fund. The premium bond, at maturity, is worth only par, and the premium is lost by the buyer of the bond. This loss in investors' principal is distributed over the number of years the bond has to run. The individual investor buying a premium bond should figure his income return on the basis of the whole outlay, and bear in mind that the premium is lost on maturity. Bonds are sold on an "income basis." Bond dealers have tables of calculations for all bonds paying from 2 to 7 per cent. and running from six months to one hundred years, so that the net return on any bond at any price can be determined in a minute. Fundamental considerations affecting the intrinsic value of mortgage, as distinguished from other railroad bonds in special classes, are (1) security of principal and interest; (2) the character of the selling market and general influences. *Security of principal and interest* are determined by the amount of the mortgage in its relation to the value of the whole property. In figuring this proposition, it is necessary to determine the total capitalization of the railroad's stocks and bonds per mile. Single issues of railroad bonds vary from $100 to $100,000 per mile, and total capitalization, bonds, and stocks from $30,000 to $300,000 per mile. The variations are caused by the geographical location of the road and its degree of organization and development. The average capitalization of railroads in this country is between $60,000 and $70,000 per mile. Actual cost of road, cost of duplication, comparative cost based on neighboring roads, and physical characteristics in the matter of construction must be considered. Obviously mileage in the form of terminals in a great city differs from the investors' view-point from mileage in a sparsely settled and poor revenue-producing territory. The bond buyer must consider the amount and character of the prior lien bonds ranking ahead of his on the same mileage. It is also his duty to consider the amount of junior lien bonds following the issue in which he is interested, for the amount may be useful in enabling him to determine that other investors have believed in the property to the extent of the total junior liens. *Security of interest* is determined by gross and net income per mile and their relationship to fixed charges per mile. Gross earnings are compared with those of rival roads; past, present, and future traffic conditions are analyzed or considered. Freight and passenger earnings are separately consid-

ered, as are questions of economical ton-mile cost and rates. Net income per mile is determined by deducting from gross earnings operating expenses and (at times) taxes. To the remainder is added income from other sources, if any. In a proper consideration of this item the net income must be analyzed in its relationship to other roads and to determine if the tendency is to increase or decrease. Also, the physical condition of the road should be properly maintained by appropriations for maintenance of way, rolling stock, etc. *Fixed charges per mile* mean interest on its bonds, rentals, and taxes, if the latter are not included in operating expenses. The analyst compares fixed charges per mile with net income and the relation of one to the other is important. A first-class bond investment necessitates that a road should earn double its fixed charges. *The character of the selling market* means that the more readily a bond can be sold, the more it is to be preferred by the investor. A bond representing a large issue by an important road probably means a broader market than a bond representing a small issue by a smaller road. Whether or not the bond is listed on a stock exchange or is a legal investment for a savings-bank, affect the market in greater or less degree. Bond values are also affected by the character of traffic; the greater the diversity the more preferable the conditions. Possible development of the road's territory as regards commerce and population, the part of the road the bond represents, the character of the road's management, and the price of money in the open market also guide the bond buyer in arriving at definite conclusions.

Collateral Trust Bonds are those secured by a deposit in trust of securities, either bonds or stocks, for the benefit of the bondholders. In case of default, the collateral deposited would be sold for the benefit of the stockholders, The terms of trust deeds vary widely, and, as in the case of every investment, care should be taken to investigate them.

Collateral Trust Bonds and Armstrong Insurance Investigation Committee.—The Armstrong Committee recommended the prohibition of insurance investments in stocks on the ground that insurance companies should not be partners in railroad, industrial, or banking concerns. Their business should be confined to insurance. Control of banks and trust companies involved entangling alliances threatening to the best interests of the country. Of collateral bonds the committee recommended: "That investments in bonds secured to the extent of more than one-third the value of the entire security therefor by the hypothecation of corporate stocks shall be prohibited."

The three largest life insurance companies' holdings of collateral trust bonds are given below:

NEW YORK LIFE.	*Market Value.*
Atlantic Coast Line, L. & N. col. 4's	$4,700,000
Central R. R. of Ga. col. tr. 5's	1,120,000
Erie R. R.—Penn. Coal. col. tr. 4's	235,690
Louisville & Nash. col. tr. 5's	171,000
Louisville & Nash. col. tr. 4's	3,465,000
Louis. & Nash.—South. Ry. Monon 4's	2,433,600
N. Y. Central, Lake Shore col. 3½'s	1,058,210
N. Y. Central, Mich. Cen. col. 3½'s	356,000
Northern Pac., Gt. Nor., C., B. & Q. col. 4's	12,500,000
Reading Co., Jersey Cen. col. 4's	1,980,000
Richmond & Wash. col. 4's, guar	4,120,000
Western Union Tel. col. tr. 5's	471,870
Total	$32,611,370

MUTUAL LIFE.	
Chicago & Alton Ry. col. tr. 4's	$1,976,000
Chi., Rock I. & Pac. Ry. col. tr. 4's	5,383,780
Erie Railroad, Penn. Coal col. 4's	2,760,000
Louis & Nash., So. Ry. Monon 4's	2,090,000
N. Y. Central, Lake Shore col. 3½'s	8,900,000
Norf. & W., Pocahontas C. & C. 4's	2,375,000
Nor. Pac., Gt. N., C., B. & Q. 4's	5,802,600
Pennsylvania Co. col. tr. 4½'s	3,814,060
Reading Co., Jersey Cen. col. 4's	1,455,000
Rich.-Washington Co. col. 4's, guar	194,750
Southern Pacific col. tr. 4½'s	1,550,000
Southern Ry. col. tr. 5's	3,000,000
Western Union Tel. col. tr. 5's	1,090,000
Total	$40,391,190

EQUITABLE LIFE.	
Atlantic C. L., L. & N. col. tr. 4's	$471,875
Chicago & Alton 4's	1,210,937
Erie R. R., Penn. Coal col. tr. 4's	1,872,500
Louis. & Nash., So. Ry. Monon 4's	480,000
N. Y. Central, Lake Shore col. 3½'s	3,003,750
N. Y. Central, Mich. Cen. col. 3½'s	1,770,000
Norf. & W., Pocahontas Coal 4's	236,562
Nor. Pac., Gt. Nor., C., B. & Q 4's	2,279,069
Railroad Sec. Co., Ill. ctfs. 4's	1,120,312
Reading Co., Jersey Cen. col. tr. 4's	980,000
Rich.-Wash. Co. col. tr. 4's, guar	515,000
Total	$13,940,005
Total, three companies	86,942,565

In the case of the Equitable, it is to be noted that the amount given may be increased by the addition of certain other issues which the Equitable holds, but which are not designated as collateral trust issues on the company's last annual report. The lists given are of the date of January 1, 1905, with the exception of the New York Life, the figures for which are given as of December 31, 1905.

A conservative and accurate financial writer, criticising the recommendation of the committee at the time, also answered a frequently asked question regarding the disposition of the collateral in event of default. He said: "The proposed prohibition of investments in collateral bonds is uncalled for and unwise. The ownership of collateral bonds involves no control of other corporations. It involves no possibility of future control. In case there is default in the payment of interest on collateral bonds, the stocks securing such bonds are not distributed *pro rata* among the holders of the bonds, but are sold in bulk by the trustees of the bonds and the proceeds distributed among the bondholders. Except that the security in the case of collateral bonds is personal property, instead of real property, there is no difference in the character of the collateral bond from that of mortgage bonds. Therefore, there is no such reason for prohibiting investments in collateral bonds as there is for prohibiting investments in stocks. Whatever motive a corporation may have in issuing collateral bonds, the bond itself may be an excellent investment for an insurance company to enter into."

Collateral Trust Bonds and Ethics.—Subsequent to the Armstrong report and its recommendations regarding collateral trust bonds, a bond expert said: "One recommendation of the committee which is likely to have a distinctly wholesome effect upon railroad financing is the disapproval expressed of collateral trust bonds secured by stock collateral. The most beneficial result of the era of railroad reorganization which prevailed from 1896 to 1899 was the conversion of fixed interest obligations into stocks, but much of the good accomplished by this process has since been undone by the purchase of these stocks in large blocks, and their deposit as security for issues of 'collateral trust bonds,' thus practically reversing the process and reconverting these stocks into fixed interest obligations. This is a phase of the financial operations of the five years preceding 1906 which has had less attention than it deserved."

Collateral Trust Bonds and Fiduciary Buyers.—One of the greatest bond dealers of the country before the Armstrong Committee said: "I don't agree with you to give a sweeping opinion that life insurance companies should not buy collateral trust bonds. Nevertheless, on principle I do not think it is wise for an insurance company." In other words, there are good and bad bonds of this class, and they should be bought with discriminating judgment, with the tests: general credit, margin of revenues in the guarantor company, and intrinsic value of collateral.

Collateral Trust Bonds and Misconception.—No other class of railroad bond has been responsible for so much misconception. The investing public, says *The Wall Street Journal*, inquires more about these bonds than bonds of any other class. It has been said that the casual investor is more disposed to investigate the credit of the company selling them, or the clientele of the banking house distributing them, than the collateral security behind them. One of the foremost bankers of the country said before the Armstrong Insurance Investigation Committee that they were not to be generally condemned, but discrimination must be exercised in buying them. The title has been in disrepute owing to the cynicism and mistrust created by some of the issues. Three general rules should be employed in determining the value and price of a collateral trust bond: (1) credit and earning capacity of the issuing company; (2) normal surplus of the issuing company after all charges; (3) value of the stock or bond collateral. Credit and earning capacity mean financial strength and reputation. Every collateral trust bond secured by stocks or bonds is, in fact, a debenture of the issuing company. Its interest is not dependent upon the payment of dividends on the stocks. The failure of C. B. & Q. to pay dividends would not release Great Northern and Northern Pacific from their liability to pay interest and principal of the Burlington joint 4's. In every respect these bonds are a joint debenture of the issuing railroad or railroads. Their value must be analyzed as are debentures: (1) What is the surplus after paying this interest: first, counting as revenue the company's receipts from dividends, etc.; second, not counting other income? (2) How are the prospects that this surplus will be maintained until the bond matures? (3) How much debt can be placed ahead of this bond? Some collateral trust bonds belong in the "good debenture" class. Without the dividends on the stocks deposited as collateral some of these bonds would have no revenue worthy the name. In such instances, therefore, the "credit and earning capacity of the issuing company" actually depend upon the dividends paid on the collateral. In such a case it is held that these bonds are "merely stocks," a criticism, however, that should be made with discrimination. Other companies having issued collateral trust bonds could meet all charges and show a surplus without using "other income" revenue; hence they are fairly well secured. The face value of a "promise to pay" of any corporation must depend upon the earnings of that corporation. It is not enough to show that in a particular year the net earnings after prior lien charges and rentals are sufficient to pay the charges on debentures and collaterals once or three

times over, as the case may be. It must also be established that the prospects for continuous payment are good before it can be said that a "bond is well secured." The analysis of value in a collateral trust is much more involved than in a mortgage bond. There are two railroad systems involved. There are also added for consideration all the factors that go to the making of stock value, as distinguished from bond value. An important item, usually safeguarded in the mortgage, is the question of the ability of the purchased railroad to increase its stock, etc. Questions of this nature became so vital in the case of the Oregon Short Line 4's that these bonds were called at 102½ to obviate the necessity of giving the bondholders too much profit. Such opportunities undoubtedly lurk in some other collateral trust issues. The matter of redemption price is therefore well worth looking into in such bonds.

On the whole, collateral trust bonds secured on stock have in them certain elements that do not make for great stability, but which add an element of speculative chance, generally tending toward appreciation of value. They are therefore, as a class, interesting investments for such as can look at them wisely. They are not, again as a class, to be recommended to those who buy blindly, trusting in the magic name of "bond."

In a word, these issues range in character all the way from the standard of the gilt-edge debenture to the standard of the speculative stock. Therefore, in buying them, "discrimination" should be the watchword.

Collateral Trust and Participating Bond.—An instrument rarely employed in railroad financing. Once used by the Union Pacific system in an issue designated as the Oregon Short Line Railroad participating twenty-five-year 4's. They were secured by deposit of Northern Securities stock, and were to share with the latter in income over 4 per cent. on the stock deposited. They were retired.

Collateral Trust Bonds Secured by Bonds.—Experts say that emphasis must be laid upon the complex nature of these "debenture-stock-bond" securities, and great caution exercised in their analysis. The redemption feature, says *The Wall Street Journal*, should always be considered. The collateral trust bond secured by other bonds is quite a different security from a bond secured by stock. It is, of course, a debenture in its nature, and must be judged as to interest security by the earnings of the issuing company and by the general credit of that company. There does not enter into it the element of "stock value," or of value as representing the control of another rail-

road. Its security value must be judged by the lien of the bonds deposited to secure it. There are not many of these bonds in the market. Analyzing two,—the five twenty-year bonds of L. & N. and the Missouri Pacific 5's of 1917,—it is ascertained that the value of the collateral is not the prime factor in making the price even of the collateral trust bond secured on first mortgage bonds. All the collateral behind both these issues is practically gilt edge. The Missouri Pacific bond is secured by a stronger margin in principal and in interest, so far as the collateral is concerned. Yet the L. & N. bond sells on a better, or at least as good, a basis as the Missouri Pacific bond.

The reason lies in the credit of the issuing company. These bonds, like the collateral trust bonds secured on stocks, are to be considered, primarily, debentures of the issuing company. It is unnecessary to demonstrate, in this illustration, that the credit of the Louisville & Nashville is stronger than the credit of the Missouri Pacific. The illustration may be taken to demonstrate the truth of the general proposition that the value of a collateral trust bond depends primarily upon the credit of the issuing company; secondarily, upon the value and earning power of the collateral deposited.

It also demonstrates the need, in considering such bonds, of care in watching the matter of redemption and other such matters. The redemption feature, as in the other collateral trust issues, may at any time be the cause of an advance in such bonds, if they are selling low. On the other hand, the redemption price absolutely precludes the possibility of price expansion beyond the fixed limit. Both sides of the question must be considered.

Collateral Trust Bonds, Incidental.—Dismissing collateral trust bonds secured by stocks and collateral trust bonds secured by bonds, the latter being, in fact, debentures, there remains another class of bond into which the collateral trust element enters more or less. It is the "incidental collateral trust" or new class of refunding general consolidated, convertible, and other bonds, typified in many of the big railroad mortgages filed since 1896. In these bonds, says *The Wall Street Journal*, the lien covers railroad mileage, terminals, occasionally lands, elevators, ships, coal mines, and everything else that costs money or that is or may be useful to the railroad. Incidentally, it may also cover bonds and stocks of other companies in which the parent corporation is interested.

To illustrate, the properties pledged under the refunding 4 per cent. mortgage of a great railway system may be listed:

Mileage, 1st lien	1,148
Mileage, junior lien	5,701
Terminals, equipment, shops, etc.	....
Leases, trackage, contracts, etc.	....
Bonds (about)	$12,500,000
Stocks (about)	$24,860,700

This is not an extraordinary issue. There are others very similar. Under all of them, stocks and bonds are deposited in large amounts.

In general, the theory of such a mortgage is that the market value of the railway, equipment, terminals, etc., under the bonds shall be great enough to make the bond safe. The securities deposited are supposed to be "additional" or "incidental" collateral, and the underwriters generally grade the bonds according to the estimated value of the real property under the lien.

The New York savings-bank law recognizes this general rule. It does not rule out a bond merely because it has stocks in its security. The question is: "Have these bonds sufficient mileage under them, and sufficient earnings behind them, to conform to the standard we want?"

The abuse of this class of bonds comes in making the collateral feature too prominent. In the original indenture of the C., H. & D. general mortgage, for instance, the payment for stocks bought was altogether too prominent a purpose of the issue. The bonds were manifestly collateral trust bonds, parading under the name and guise of a refunding issue. Other instances might be adduced.

The investor, however, need not watch these bonds with any great anxiety. Efforts to float general or refunding bonds that are not anything but collateral trust bonds, are checked by the underwriters. The big bond houses of Wall Street watch these issues carefully, and very few big issues come before the investment public under false colors.

The incidental collateral bond, it will be noted, belongs to a very wide class. Its object is the general financing of a broad plan for the railroad. Such plans as were carried out during the "merger period," from 1896 to 1902, always involved the purchase of stocks and bonds. Therefore these purchases were put in under the mortgage. Very frequently they could not be placed under a straight collateral trust bond.

For instance, Norfolk & Western, Baltimore & Ohio, Lehigh Valley, Alton, Big Four, Pere Marquette, and many other stocks bought for control by other great railways would have made a sorry show, at the time they were bought, as collateral behind an issue of straight collateral trust bonds. They had to be financed under a lien upon the strength of the purchasing company. Incidentally, the stocks bought are put in with

the security, but the bonds do not by any means depend upon the value of the collateral.

Collateral Trust, Debenture, and Convertible Bonds, Relative Merits of.—A discussion of such issues on general grounds is not likely to be of any great service. Every debenture, says *The Wall Street Journal*, must be considered by itself, for the simple reason that its strength and value are dependent entirely upon the corporation that issues it. New Haven debentures, for instance, are almost gilt-edge, while Wabash debentures are highly speculative, and are certainly little better secured than are stocks.

Similarly, collateral trust bonds must be considered individually. If a bond is a lien on railroad property, one can always guess that there is at least $10,000 per mile of value underneath the bonds. If it is a lien only on stock, the critic must consider not only the credit of the issuing company upon which the collateral has a lien, very like the lien of a debenture, but one must also analyze closely the value of the collateral underlying the bonds.

Nor is it enough to discover that the collateral at the present moment is worth 150 per cent. of the face value of the bond. Experience is even now proving that "strategic value," "nuisance value," and several other elements, which are usually considered attributes of cheap, common stocks, enter very largely into the question of the ultimate value of a collateral trust bond. The element of speculation lies in the fact that powerful banking and railroad interests are generally in a position to make or to ruin the market for the stocks which underlie the collateral trust bond.

To illustrate, suppose that the Atlantic Coast Line Louisville & Nashville 4's should default in 1910. The control of Louisville & Nashville underlies these bonds. It might very well be that, through command of the securities market, or through influence over other possible purchasers, some banking firm would be able to make a very miserable market for this collateral. The same statement is true with regard to Rock Island collaterals, New York Central collaterals, and, in fact, all other issues of this class.

It comes down to this—that the collateral trust is really a triple lien; first, on the credit of the company which issues the bonds; second, on the collateral which underlies the bonds; third, on the good faith and disinterestedness of the directors of the issuing corporation and the bankers or magnates who control the market, and therefore the value of the collateral.

These three elements, combined in one bond, make the col-

lateral trust a security about which it is impossible to generalize. Every bond must be considered on its merits, these three elements being taken into account:

1. What is the surplus after charges of the issuing company, and what is its standing in the investment world?

2. What is the present value of the collateral?

3. Who are the bankers that finance the affairs of the issuing company? In default, would it serve their interests to make as good a market as possible and as good a sale as possible of the collateral, or would they be likely to attempt to depreciate the value of the collateral?

Collateral Trust Bondholders, Real Claim of.—An attorney in charge of the bond department of a trust company asked where collateral trust bonds would stand in a forced reorganization of the issuing company, said:

"A collateral trust bond differs from ordinary bonds of railroads or other corporations in that there is pledged as security for the bonds with the trustee with whom the agreement is made under which the bonds were issued, certain specific stocks or bonds of other corporations to which the lien of the bonds is confined. In other words, the bonds, instead of being secured by a mortgage covering the whole of the real and personal property of the corporation making the bond, are secured by a pledge of specific collateral. The value of the collateral trust bond depends to a very large extent upon the actual value of the pledged securities. It is usually the case, when such bonds are issued, that all the other real and personal property of the corporation is already covered by other mortgages.

"In the event of the insolvency of the corporation issuing collateral trust bonds, and default in the payment of the interest thereon, two courses would generally be open to the trustee for the protection of the holders of the bonds, and the contingency under which either of these courses might be pursued would of course be defined in the instrument under which the bonds had been put in circulation. The first course which might be pursued would be to offer the collateral for sale at public auction. In order to realize the greatest amount for the bondholders it will be seen that in such an event unity of action on the part of the bondholders would be required, otherwise the fair market price of the stock or other collateral which was offered for sale might not be realized, as the amount necessary to purchase the collateral would probably be a very large sum. If the collateral was not protected it would sell below its real value.

"The other course left for the trustee to pursue in such case

would be to take possession of the property represented by the collateral, if it is in the nature of stock, elect officers to represent the bondholders, and operate the business of the corporation until such time as the property could be disposed of, either by sale to some other corporation or by being turned over to the bondholders. In this latter case the earnings of the corporation could be paid over to the trustee in the shape of dividends on the stock, and these in turn could be used to pay the bondholders.

"A difficulty in the way of carrying out the last-mentioned course might exist in the fact that the property of the corporation whose stock had been pledged as collateral might be leased to or in the possession of the obligor company under some arrangement so that it would not be possible for the bondholders to take immediate possession. In this event it might be necessary for the trustee, having elected his own directors and officers, to cause an action to be brought to terminate the connection between the obligor company and the company whose stock had been pledged with the trustee. Meanwhile the trustee would probably be entitled to the appointment of a receiver of that property.

"If a sufficient sum was not realized from the sale or other disposition of the collateral to pay the amount due on the bonds, the trustee in behalf of the bondholders would proceed against the obligor company to recover a judgment for the deficiency. This judgment would not be entitled to any priority, but would be treated like any other judgment against the corporation. It will be seen from the above considerations that the question of the value of the underlying security is even more important in the case of collateral trust bonds than of other corporate first mortgage bonds."

Convertible Bonds, A Banker's Brief for.—As there seems to be a growing tendency on the part of both corporations and investors to resort to the convertible bond as a means on the one hand of borrowing, and on the other of investing funds, it is interesting to investigate the causes for this movement.

On the part of corporations, the usual method of borrowing has been either to issue a junior lien upon the property or to sell stock; but the convertible bond, as a combination of the two, is of advantage to both the company and the investor. Through the convertible bond a corporation is able to borrow money on about the same interest basis as that paid by the junior fixed liens (*i.e.*, on from a 3½ per cent. to a 5 or 6 per cent. basis, as the case may be), although at the end of a certain time the convertible feature may begin to operate, and

therefore the issue to decrease and gradually disappear as a fixed lien. If, however, in the place of a convertible bond, additional stock were to be issued, it would have to be at an attractive price, and the tendency of such an issue might be to depress the value of all the stock, even though it were understood that the company would maintain its dividends at the usual rate. In most cases this rate is greater than the interest paid on the fixed bonded debt, and the company is therefore obliged to pay that higher rate of interest on the increased capital, and in that way to distribute to the stockholders immediately the increased earnings resulting from the company's use of the larger capital, whether it be to the best interest of the company to do so then or not. Otherwise the company must suffer the depression to its credit and decline in the price of its stock, which a decrease in dividends would produce. In other words, from the company's point of view, issuing a convertible bond has the advantage of being the same as selling future stocks at the present time, and not paying more as interest or dividends on the money obtained than is paid by the junior fixed liens of the company. This does not, of course, apply in cases where the dividends equal to the interest rate or less are being paid on the stock; but in such cases the conversion feature enables the company to get money at a fair rate, and even in some cases makes it possible to obtain funds where it otherwise could only borrow at an exorbitant rate.

On the part of the investor, a convertible bond has peculiar features, in that it makes it possible for him to buy a direct obligation of the company on about the same basis as that of the junior liens, so that he may get a fair return on his money until such future date as he can convert into stock. The price at which he has the option to convert is usually at or near the present price of the stock, and with the general tendency of business in this country to expand, and the values of properties that are well managed to grow, this conversion feature is almost sure through appreciation in the price of the stock to become of value. In fact, many convertible issues actually sell at a higher price than the prior liens which come ahead of them, because the investor is willing to pay that much more for the conversion feature, even though it does not become operative for some years, and the present price for the stock is below the figure at which he will have the right to convert. Such issues as the Pennsylvania Convertible 3½'s, Erie Convertible 4's, and Atchison Convertible 4's show this very plainly. By the convertible bond the investor therefore has not only a lien on the property of the corporation bearing him a fixed rate of interest, but also is entitled to share in the future profits

resulting in the increase and growth of the company's business.

In practically all cases, convertible bonds are subject to redemption at a certain premium; but the provision is usually made that when the date for redemption arrives, or a call for redemption is made, the holder has ample time in which to take advantage of the conversion feature should he so desire.

Convertible Bonds, History of.—The issuing of convertible bonds, says Alexander Dana Noyes, was a common occurrence among the railroads of the country thirty and forty years ago; such companies as Reading, Erie, Camden & Atlantic, Burlington & Missouri River, Boston, Concord & Montreal, Eastern Massachusetts, Erie & Pittsburg, Michigan Central, New York & Oswego Midland, Chicago, Burlington & Quincy, Chicago, Milwaukee & St. Paul, New York, New Haven & Hartford, besides many other prominent railroads, making use of this form of bonds.

The reason why so many of the railroads thirty and forty years ago were forced to resort to issuing convertible bonds was because the companies desired to make their bond issues as attractive to investors as possible. Railroad bonds at that time did not hold the high place in the opinion of investors that they do at the present time. For some reason, however, the issuing of convertible bonds became unpopular among railroad financiers, and a few years ago it seemed as if this class of securities was about to become extinct. During the decade ending with 1900 there was hardly a single issue of bonds bearing the convertible privilege, while through the gradual conversion, maturing or foreclosure of those previously issued, there were very few bonds of this character outstanding in the hands of the public.

In 1901 and 1902, however, the convertible bonds suddenly leaped into favor again. Early in 1901 the Baltimore & Ohio issued $15,000,000 of convertible bonds. The Union Pacific followed shortly afterward with an issue of $100,000,000 of convertible bonds. The Pennsylvania Railroad also issued $50,000,000 of convertible bonds. The Colorado Fuel & Iron was the most notable among the industrials to issue bonds convertible into the stock of the company. The reasons which led to the sudden reappearance of convertible bonds on such a large scale in 1901 and 1902 are interesting and worthy of being mentioned. There appear to have been three reasons for the heavy issues of convertible bonds at that time.

The first of these was the enormous amount of securities of

every description which had been offered to the public during the previous three years. The large number of industrial corporations which had been organized, beginning with 1898, with their capitalization running into the hundred of millions, together with the enormous stock and bond issues by the railroads for the acquisition of other companies and other purposes, had already begun to cause the supply of securities offered the public to be in excess of the genuine investment demand. This condition existing in the investment market forced the railroads to make their various bond issues as attractive to the inventor as possible, so as to render the issue a success. The railroads were shrewd enough to take advantage of the spirit of rampant speculation prevailing at that time. The fact that the convertible privilege was attached to the Union Pacific and Pennsylvania bond issues helped considerably toward making these two bond issues a success. Investors bought these bonds, not alone because they considered them good investments, but also because they saw the possibility of making a profit by exercising the convertible privilege.

Another reason which undoubtedly influenced the large issues of convertible bonds in 1901 and 1902 was the fact that these securities, in a number of instances, were not secured by a lien on the road or property of the company issuing them, but simply by stock securities of other companies. Bonds of this character are naturally less attractive than those secured by a direct mortgage upon the property of the company issuing them, unless they are accompanied, as in the case of the convertible bonds, by some other privilege considered of equal value.

The third reason which appears to have led to the large issues of convertible bonds at that time was the desire to render impossible the loss of control of the company in the open market. The Northern Pacific and Louisville & Nashville episodes had brought forcibly to the attention of the financiers controlling the different railroads the danger always present of the majority of the shares of the company being acquired in the open market by interests other than those in possession of the management. Through a large issue of bonds, convertible at any time into stock, it was believed that the capitalization of the company would be increased to such an extent that it would be impossible for any single interest, however powerful might be their resources, to purchase the actual control of the company. It is an open secret in Wall Street that in at least two instances the attachment of the convertible privilege to the bond issue was influenced by the desire to render impossible the loss of the control of the company.

Convertible Bonds, A Study in.—The announcement, says *The Wall Street Journal*, that a great railroad proposes to issue $50,000,000 of bonds convertible dollar for dollar into its common stock, is not welcomed with enthusiasm in the most conservative bond houses.

The claim is made, and justly, that there are too many bonds in the market to-day whose value is made by extraneous privileges, quite apart from the intrinsic worth of the bond as a bond. Conversion, participation, and similar innovations are forms of the bonus. When Seaboard Air Line gave away a block of its common stock with its bond last year, it merely went the bigger and stronger corporations one better in the matter of bonus.

In fact, modern finance has degraded the term "bond." Up to ten, or even five, years ago the word meant much. It meant security, safety, stability, credit, and assets. To-day it may mean these things, or it may not. It may mean instead a call on an active speculative stock, as in the case of the Erie convertibles, or a share in the politics of New York City, as in the case of the Consolidated Gas convertibles. Then, again, it may mean merely an equity in earnings, as in the case of the millions upon millions of collateral trust bonds secured on common stocks.

To illustrate the part that speculative chance plays in the making of the price of convertible bonds, the following list is instructive:

CONVERSION PRICE.

Bond.	*Stock.*	*Rate.*	*Price.*
Erie	50	4	95⅝
Consolidated Gas	100	6	183
Pennsylvania	*70	3½	103½
Union Pacific	100	4	109

* Par, $50.

The prices are largely made by the conversion privilege. No one contends that the Erie debentures are worth within ten points of the price except as a call on twenty shares of Erie common, good after April 1, 1905. Neither does any one believe that Consolidated Gas 6's, as bonds, are worth 183, or Union Pacific 4's worth 109.

The bonds are unstable. For their value as a call on the stocks they sacrifice one of the most essential characteristics of the "bond" of ten years ago. They fluctuate with the stocks, or nearly so. Now fixed income does not save them. They are speculative. Of course, a 4 per cent. income, with the call on stocks thrown in, looks attractive. The Erie bonds are doubtless very cheap. But cheap bonds are usually ventures

for the business man, not for the innocent and often ignorant investor.

Atchison is to join the fraternity to the extent of $50,000,000. The bonds, or debentures, will probably be very popular, and should sell well. They are to be created by a strong and conservative company, backed by glorious territory, growing thoroughly solvent and progressive. They will be a lien on new mileage and many other things. Their interest will precede the preferred stock dividends. They will be cheap. That will be because a man may buy a 4 per cent. bond and get for nothing a call on ten shares of one of the best speculative railroad stocks in the list.

There is no remedy for this innovation. The bonds, of course, are not savings-bank securities, and were never intended to be such. Some of them, notably the Union Pacific 4's, are pretty well secured; but even so, they are only in part prior lien. The new Atchison 4's will be the same. They will be good bonds in themselves, and can be recommended on that basis as fair investments to yield about 4 per cent. or more. But they will be strictly for business men. If Atchison common ever drops again to the 40's, as it did not so long ago, the conversion privilege will dwindle in value. If, again, the stock goes to 110 or more, the conversion privilege will be worth probably over $100 per bond.

From an investment standpoint, these bonds are all second-grade in the matter of security for principal. They should not be bought by the class of investors that buys merely because they want an income, without knowledge of the railroad property or of the stock market. Any one who owns Union Pacific convertibles should know the property as well as does the Union Pacific stockholder. He should be in touch with its current history, familiar with its management, alert for changes, ready to take advantage of such events as, for instance, the rise of Union Pacific to 130 immediately before the corner of May 9, 1901. In other words, the stockholding class should buy these bonds, not the strictly investment public.

The contrary view, of course, is very popular. It is claimed that these bonds have the fixed income and some of the stable character of the mortgage bond, and at the same time participate in the privilege of the stock in the matter of stock market price. This is true, in a sense. This article does not condemn these bonds, but does condemn investment in them by the investment class, strictly speaking. It is not fair or honest to sell to these people as a bond a security that must share in all the fortunes of the stock, that may be put up or knocked down by irresponsible stock-jobbers on the board, or used as a lever or hammer, as the case may be, by stock-market manipulators.

Convertible Bonds, Why Recommended, and Some Qualifications.—1. The convertible bond, *per se*, is generally a fairly secure debenture or junior lien. As such it is not to be condemned by the investment public, being prior to all the stocks of the issuing company.

2. As junior liens they share in the equities of the company, in the same way that the M., K. & T. second bonds, for instance, will show better profits to the owner, if success should come, than will be first lien bonds.

3. The "call" is itself an equity of unknown potential value. The nine-year call on Pennsylvania at 150, for instance, which goes with the 1915 bonds, would be cheap at $10 per share.

4. Such "calls" at ten, fifteen, or twenty points above the market, if given five years ago on the same stocks, would, in most cases, have shown tremendous profits; as witness the Union Pacific bonds.

5. The privilege to the company to redeem the bonds, if exercised, would in all cases still allow large profits to the holder of the bonds.

6. In fine, these bonds are a fixed interest investment, yet have all the delights and chances of an unlimited stock.

These points are turned over and over by each critic of each bond. Of course there is a lot in them. The convertible privilege will, in many cases, make good almost all that is promised.

The public, however, must not forget one thing. The owner of Union Pacific stock since 1901 has received better revenue, and sees at least as much profit, as the holder of the convertibles. The price of the bond fluctuates widely. The average buyer feels just about as comfortable in stocks as in bonds convertible into stocks and dependent upon stocks for their prices.

Suppose that a contingency should arise which would lead to default on Erie convertibles. In what respect would the holder be better off than the holder of the preferred stock? At such a time, of course, the "call" would be worth nothing at all.

In foreclosure all liens would have to be satisfied prior to convertibles. The convertible bond would be merely a second, third, fourth, and fifth lien upon certain properties. The entire lien would perhaps be worth ten cents.

If convertibles are bought with this fact clearly in mind, and with full knowledge of prices, there is much to recommend them.

Debenture Bonds.—Almost identical with income bonds, sometimes cumulative regarding interest, but usually non-cumulative, and without power to proceed to foreclosure except at maturity. Their value depends entirely upon the credit of the company issuing them.

Debenture Bonds, History of.—Authorization of an issue of $50,000,000 4 per cent. debenture bonds by the New York Central, of which $30,000,000 were bought by a syndicate at 95, in 1904, caused a good deal of discussion, both as to the character of debenture bonds, and as to the low price of issue. Debentures have been a favorite form of bond issue with this company, its first debentures having been put out in 1884, $6,500,000, being for retiring floating debt. They were to mature in twenty years, and bore 5 per cent. interest. Before that but little had been heard of debentures on American railroads. The Stock Exchange records in 1869 refer to $3,500,000 of "short or debenture" 6 per cent. bonds of the Pennsylvania Railroad and to redemption bonds of the Illinois Central, securities of both of which companies were largely owned abroad.

The term debenture seems to have been borrowed from England, where debenture stock was and still is in vogue, and where it usually means merely a stock without voting power, but with absolute preference as to dividend. The London & Northwestern Railway, for instance, has outstanding £38,232,906 3 per cent. debenture stock, £15,100,406 guaranteed 4 per cent. stock, £23,080,620 consolidated 4 per cent. preference stock, £1,177,737 simple 4 per cent. preference stock, and £42,871,737 ordinary stock. Only the last-named stock has a voting power.

Generally a debenture bond is defined in this country as a bond without a mortgage lien, and hence without foreclosure powers. It usually does not differ from the old-time income bond—a term which became extremely unpopular and which has largely been abandoned. Since interest on a debenture bond is "payable if earned," the reason why it should sell lower than other issues with foreclosure rights is apparent. Yet as a prior lien ahead of stock it has been readily marketed by companies of high standing, like the New York Central, where confidence is felt that dividends can be maintained indefinitely, and that there is thus a practical certainty of receiving interest on the bonds. One interesting fact is that although New York Central stock went above 170, the old 4 per cent. debentures from 1900 to 1904 touched only 103½—this being in 1901. On the other hand, the 100-year general 3½ per cent. bonds sold up to 111¼. The 4 per cent. debentures in July, 1903, broke to 95, while the lowest, the general 3½'s, sold at, in 1903, was 99¾.

It is popular belief that the reason why the company did not sell the $15,000,000 general 3½'s remaining in the treasury was conviction on the part of the directors that they could not be placed at anything like that figure. One convenience of debentures is that they can be retired on short notice.

Divisional Bonds, as the title implies, are secured by a mortgage on a certain part or division of a railroad.

Endorsed Bonds.—Owners of coupon bonds should be careful not to write upon the securities. Buyers sometimes write their name or initials on bonds, and the result is they are very hard to sell. Writing of this kind on a bond makes it an endorsed bond, when they are not a "good delivery" on the New York Stock Exchange, and in the outside market must be sacrificed at a loss of several points. Erasures of names, even though only made in lead pencil, make a bond less salable and more difficult to negotiate than one not marked.

Equipment Notes and Car Trusts.—In point of fact a chattel mortgage. Car trusts never default, because if they did the road would lose its equipment and be obliged to discontinue business. They afford a railroad the opportunity to buy its rolling stock on the instalment plan. The bonds are secured on equipment purchased. Ordinarily the amount of the issue is less than the cost price of such equipment, giving the lender a margin of protection, and is payable in instalments at certain specified times covering a period of years. These instalments also provide for deterioration by giving additional margin, as for the extinction of the debt, all of the cars remaining as security for the loan until the last instalment is paid. The bonds pay a fixed rate of interest, payable in the same way as other bonds. As an illustration it may be said that the Erie Railroad has bought equipment for which it paid $1,000,000. The company issued January 1, 1906, $800,000 of 5 per cent. equipment bonds, the principal payable at the rate of $200,000 every six months, and the interest payable semi-annually on the first days of January and July. The last payment on principal would be made January 1, 1908, when the last semi-annual coupon of 2½ per cent. would also be paid and the debt satisfied. In order to identify the cars subject to such a mortgage they are usually marked by the railroad company or by the agent of the trustee. It is well to state that the outside public does not, as a rule, participate in the car trusts. The notes are generally taken by banks, insurance companies, and other investment institutions, who recognize their advantages for the scientific investment of reserves.

Another description is: Car trusts, or equipment notes, are short-time obligations issued to pay for equipment. They generally represent 80 per cent. to 90 per cent. of the cash value of the equipment. They are issued in serial form, 10 per cent. of the issue being payable each year. The whole issue is therefore

paid off in ten years. The equipment is pledged as security under the notes, and, as each series matures, the lien becomes stronger for the remainder, because any part of the issue outstanding is a lien upon the entire equipment pledged under the original mortgage. The lien cannot be abrogated or infringed upon in any way until the entire amount of the equipment is paid off.

The average interest paid by the railroads on their bonds in 1903 was about 4.15 per cent., and the average yield to the investor in bonds was about 3.75 per cent. The average yield to the holder of equipment trust was 4.25 per cent. or better.

The reason the banks, trust companies, and investment companies like the car trusts is that they can be bought at any time, under any market conditions, with perfect safety. There has never been a default on a car trust in the United States. All through the receiverships of the '90's the receivers paid car trusts regularly, because the railway simply had to have the equipment, and could only keep it by paying interest and instalments on the equipment trusts.

The scientific buyer, bank or otherwise, buys the maturities of an equipment trust in much the same way that the dealer in commercial paper buys the thirty and sixty-day paper of well-known merchants. He buys to hold to maturity. He can buy maturities at six months, a year, a year and a half, etc. He knows the exact date upon which he will get his money, and the exact amount of money he will receive. He only pays one commission, namely, the buying commission, and he figures to the last cent the percentage he will receive upon the investment of his capital.

Naturally, car trusts are not a popular investment. There are only about $75,000,000 to $100,000,000 of them in existence, as against over $5,000,000,000 of long-time railway bonds. The railway bonds become well known to the public and are subject to a competitive demand, which puts their prices up. Equipment trusts are not generally listed, and are dealt in on a very narrow market, not being subject to this wide, competitive demand.

The equipment trust cannot be considered funded debt. It is really a deferred liability, against the income account of future years. If it is properly followed out and paid out of income every year, it is just as much a direct charge out of the revenues as it would be if the whole sum were taken out of one year's account and invested in equipment. The issuing company simply pays interest and borrows the money, intending to make it good out of its current revenues as time goes on.

In the matter of definition, *The Financial Chronicle* distinguishes between (1) car trusts and (2) equipment bonds. The

earlier form of car-trust certificate issued by a trust company, according to a recent compilation, was employed by seven railroads. While no less than twenty in the same period issued equipment bonds. "It should be understood," says this journal, "that the term 'equipment note' is frequently used, and without impropriety, instead of the expression, 'equipment bond.' It is also sometimes employed in place of the words, 'car trust certificate'; but in this case we consider the application unfortunate, for in the interest of precision this last-mentioned term might better be confined to the securities on the face of which a trust company 'certifies' to the holder's interest in the contract, leaving the words 'bond' and 'note' to the direct obligations of the railroads."

An expert accountant, asked to differentiate between *equipment notes* and equipment or car trusts, said:

"There is no difference between equipment notes and equipment trusts. As a rule, it is not customary for railroads to create such obligations unless funds for those purposes cannot be secured through other channels. Equipment notes can be found, however, in a number of the Pennsylvania Railroad reports. The principal of such securities, according to correct theory, can be finally charged to capital, while the interest is paid from current earnings. It is reported that the Pennsylvania Railroad resorts to equipment notes in order to distribute both principal and interest payments through the operating expenses of a year. Notes of this character are a lien on the equipment purchased, and are obligations of the railroad somewhat similar to a debenture bond.

"Railroads often force concerns to take equipment notes in payment for cars and engines. In such cases, the paper is disposed of through usual financial channels for what they will bring. Such notes do not find general acceptance as readily as an ordinary outright bond. Interest charges are high on a floating debt like that as a matter of natural sequence."

Extension Bonds.—They are secured by a mortgage on an extension of an existing railroad. Divisional and extension bonds possess no lien on the other property of the railroad. In the event of foreclosure of a railroad and reorganization, the danger always exists of separation of a division from the corporation owning the main line, upon which trunk this branch is dependent for its source of income. The same is true of an extension.

French View of American Railroad Bonds.—M. Neymarck, the French economist, when asked, "Do American railroad

securities possess attributes and advantages comparable with French bonds?" replied:

"Certainly not. It is true the debt of American railroads is not excessive. Many of the great companies, as the Chicago-Milwaukee and the New York Central, possess a capital stock equal to the bonds issued; but this situation seems inclined to change. Last year, notably, divers companies floated nearly $580,000,000 worth of bonds, and none have been reimbursed. One can understand that, fifteen or twenty years ago, when stocks as well as bonds yielded 5, 6, and 7 per cent., and were negotiated at a 20, 25, 30, and 40 per cent. better market than to-day, investors could redeem their holdings and diminish their risks with the excess of the normal revenue received. To-day it is different. Many of them sell above par, thus diminishing by so much the net revenue.

"The disadvantages and risks of these investments are numerous:

"1. It is difficult to obtain information as to the exact value of them.

"2. The value depends upon the London or New York market.

"3. The denominations are very great, $1,000 per bond.

"4. The reimbursement of these bonds is not done, as are those of French and most foreign railway, by annual or semi-annual drawings. It is done only once—at the expiration of the company. It is not rare to find bonds to be reimbursed in 95, 100, 150, and even 456 years. For example, the 4 per cent. Atchison-Topeka, quoted at 104 and yielding 3,875, are to be refunded in 1995, or 90 years; the 4 per cent. of the West Shore, quoted at about 108, are to be refunded in 2361, or 456 years; and so on with others.

"5. When the time for redemption arrives, where will the possessors of the titles be?

"6. To obtain one-half or three-fourths per cent. a year, is it prudent to invest in bonds whose redemption is so far in the future? Are not the safe bonds of our great French lines, which yield about 3.25 per cent., giving a premium of 50 francs ($9.65) if 3's, and 95 francs ($18.335) if 2.5's, and which can be negotiated with the greatest ease, and on which, if one does not wish to sell, the banks will advance 50, 60, and 75 per cent. of their value—are not these bonds a better investment?

"7. We believe any one should be rich to invest in the luxury of American railroad stocks and bonds. Such investment is not suited to the modest, tranquil French savings. It should be noted that our great French insurance companies, which make such infinite varieties of foreign investments, possess no American railway stocks or bonds.

"8. It is true that many American insurance companies possess them, but these companies are à courant of all events which could influence the course of the market, and can more easily and more quickly adapt themselves to conditions than the modest, quiet French rentier.

"9. In our opinion French savings could, with any reason, be invested in such values only when they are presented by the large banking houses and financial establishments of France. In this case the American companies would have to make very exacting rules with the French fisc; they would need a responsible representative to assure investors. And in the second place, if these values were quoted upon the Paris bourse and negotiable upon the official market, the coupons would necessarily have to be paid in France and reimbursements made according to European usages, because the French public would never become habituated to a redemption 50, 75, or 100 years in the future. If reforms of this kind could be obtained, the inconveniences and risks of these values would disappear."

These criticisms are decidedly pertinent, from a foreign standpoint. Points number 1, 2, and 3, of course, have no force from the standpoint of the American investor.

The point raised by the critic under 4 will not greatly appeal to the American buyer. The long-term bonds are not only liked by the average American investor, but are preferred over the short-term bonds. The reason is that the buyer buys for revenue only, having due regard to the stability of his principal, but not to the contingency of its coming due. The average American investor, if he has a satisfactory bond, regrets its maturity; and is very willing to take another similar bond in exchange.

In regard to 4 and 5, it would be interesting to know what M. Neymarck thinks of the perpetual debenture stock of, for instance, Grand Trunk, Lehigh Valley, Canadian Pacific. This criticism would rule out all stocks, because they do not fall due, but are in the nature of a perpetual lien. If there is a good broad market for any bond or stock, the argument is perfectly futile so far as that bond or stock is concerned.

Point 6 refers to market and collateral value in France alone. The market for sterling American bonds is quite as good in New York as in the market for French railroad bonds in Paris. Also, any bank will loan on, say, trunk-line first mortgages up to "50, 60, and 75 per cent." of their value. This criticism is, therefore, also purely local.

Point 9 is for bankers only. The conclusion appears to be that the Paris market would take kindly to the collateral trust notes and short-term obligations of our railroads, provided that

they were placed through French bankers. This has been the case. For example, the First National Bank found a ready market in Paris for Rock Island 4½ per cent. notes, placed through French banks.

In general it may be said that the criticism of M. Neymarck need not cause the least uneasiness to any American holder of American bonds. Practically every point made is local in its significance, and does not apply to the American bond at home.

Guaranteed Bond, Status of.—*Question.*—Will you give the status of a guaranteed bond compared with the other mortgages of the guaranteeing company? In case of a default on interest, is it an obligation on the company giving such guarantee ahead of its second and other mortgages coming after, or does it come after all fixed charges have been met?—H. T. O.

Answer.—It is somewhat of an axiom that a guarantee on a bond is only good as long as the bond itself is good. It is difficult to make a general statement covering the status of guaranteed bonds, but in practice the following has generally been the case: Guarantees by one company of the bonds of another company rank after the direct mortgage obligations of the guarantor company, for in event of foreclosure of any of these mortgages the guarantor company is necessarily extinguished and its guarantee is worthless. On the other hand, if the consideration for the guarantee is of great value to the guarantor company (as, for example, a lease of a piece of road absolutely necessary to the guarantor), it may be found advisable by the mortgagees of the guarantor company to continue performance of contract, even though their own interest be in default. Thus, in the long run, the absolute merits of the guaranteed bond frequently determine its investment value quite apart from the guarantee.

Guarantee, Value of.—How far does a guarantee of one company's bonds by another hold in law? A bond lawyer says:

"Like a check or note endorsement, the banking value of a bond guarantee depends upon the name and conditions printed on the back of the bond. In any case a guarantee of interest and principal is no better than an indorsement on a promissory note. It has no lien in the sense of a mortgage bond, but it ranks ahead of stock as to assets in a forced settlement with all the general unsecured indebtedness. If the guarantor is known to be financially strong, the agreement carries great weight in the price received from the sale of such bonds.

"When corporations first began to guarantee the bonds of other companies questions were raised as to the validity of such

agreements, the contention being made that such guarantees were *ultra vires*. The question was argued in many courts, and this conclusion reached: Where the corporation which guarantees the bonds has a pecuniary interest in the company whose bonds are being guaranteed; or where the improvements which will be made through the use of the proceeds of the bonds will be beneficial to the corporation making the guarantee, the agreement is certainly valid. So far as New York corporations are concerned, the statute expressly confers the power upon stock corporations owning the entire capital stock of another domestic corporation engaged in the same general line of business. The exact effect of this legislative declaration cannot be known until some case arises under it."

High Premium Bonds.—A Stock Exchange house of high standing said in 1906:

"The end of the Eastern war and the resulting destruction of property, the marked revival of business activity all over the world and the large increase in gold production acting as a strong stimulant to all forms of enterprise, mark, in our judgment, the departure of the era of very cheap money, with no prospect of its return until after the next commercial or financial panic.

"Henceforth, therefore, the tendency of prices for securities of fixed yield is likely to be downward.

"The general propriety of 'bond reserves' is not in question. It is, however, most important that if bank reserves are to be composed partly of bonds, they should be maintained in a way best calculated to meet the new conditions, and should consist only of bonds which can be readily sold at cost when the reserve is needed.

"Those bonds are most readily salable at cost which have a broad market in the principal financial centers at a price about par, because ten buyers can be found for a bond at par to one buyer for a bond at a considerable premium, even though both be issued under the same mortgage. Because a bond is an obligation to pay its par value only, the premium being no part of that obligation, it becomes necessary for the buyer of a bond at a premium either to write his purchase down to par at once or establish a sinking fund for that purpose.

"Bankers will do well to hold as 'bond reserves' only bonds with little or no premium, leaving 'premium bonds' to investment institutions and such others as cannot be compelled by depositors to liquidate in a time of financial strain.

"Furthermore, bonds of the highest class (in which class these 'premium bonds' mainly lie) have experienced their full

growth in security and in the appreciation of the investor, and will be the first to feel and reflect the rising rates of interest, which will necessarily tend to depreciate the exchange value of all fixed income. For in the case of such bonds the interest rate is the one controlling factor in their prices, and the price is not influenced by other considerations such as degree of security, etc.

"There exists, however, one class of bonds to which this reasoning does not apply. We refer to those bonds which can be converted at the opinion of the holder into stock of the issuing corporation. At the present time some bonds of this character can be purchased about par, a price which measures but their value, properly secured, as mere promises to pay principal and interest.

"We strongly recommend the exchange of high premium bonds for those selling at or near their face value among which these convertible bonds seem to us especially desirable."

Income Bonds are bonds on which it is not obligatory for the issuing company to pay interest unless the actual net income of the company is equal to or in excess of the amount required for interest. They are, therefore, usually but not necessarily non-cumulative. An income bond has not the power to foreclose if interest is not paid, and its claim on assets in event of foreclosure by a preceding mortgage is subservient to all prior obligations. In most cases income bonds are issued under a mortgage defining specific property on which it is a lien. In almost every respect an income bond stands in the same position as a first preferred stock, except that a date of maturity is named, when, if the principal be not paid, the income bondholders may proceed to foreclosure.

Income Bonds, Arguments Against.—In many cases income bonds are a source of irritation and trouble to a company and owners without conferring corresponding benefits. An officer of a company involved in litigation over the payment of its income bond coupons then in arrears said: "I am frank to say that an income bond is a misfortune. I have never known one that did not turn out disastrously, and you may travel along the pathway of finance and find the road strewn with the dead bodies of income bonds. Persons buy such securities thinking that they are getting a mortgage; something concrete against the corpus of the corporation issuing them. If there is any mishap, and there is default on the coupons, they come to a clear understanding of what they really own." Holders of income bonds not receiving interest are frequently known to

violently attack the policy of companies that withhold dividends on the income bonds and yet spend a great deal of money on improvements to the properties. This is almost always the case. The existence of a non-interest income bond imposes an extra check upon the management in making expenditures on maintenance and improvements out of surplus earnings. Almost all income bonds provide that the interest is payable "if earned after fair charges for improvements," etc. In most cases the provision is so vague that it leaves an opening for professional litigation, or for the honestly disgruntled bondholder, who thinks that his rights are being infringed upon by the directors of the company in appropriating for the improvements some funds that might have been used to pay the coupons on income bonds. It is fair to assume that no corporation should create an issue of income bonds unless it is pretty well established at the outset that the income of these bonds will be regularly paid at all times and under all conditions. The trouble is that the innocent, and often ignorant, investor who buys income bonds buys them on the supposition that they are a bond. As a matter of fact, an income bond is not a bond at all, so far as interest payments are concerned. It is only guaranteed as to principal. As a revenue producer it is, therefore, less stable in its nature than is a guaranteed stock, and is altogether a less desirable security than is a guaranteed stock whose guarantee is written by the same company that puts out the income bond. A proper realization of this fact would save the holder of income bonds a great deal of unnecessary trouble, and prevent vexatious and unprofitable litigation.

Income and Debenture Bonds Call for Careful Selection and Research.—Railroad debentures and income bonds are practically forms of the "promise to pay," at a certain date, the amount of money represented in their principal, the conditions attached to the payment of interest constituting the most marked difference between the debenture and the income bond.

A debenture, in the strict sense of the word, is an acknowledgment of debt and a pledge to pay interest regularly. An income bond, in the same sense, acknowledges the debt, but only promises to pay interest in case the earnings justify it.

They are alike in having no lien on property directly. In a foreclosure they rank behind all mortgages, senior and junior, and are only ahead of guaranteed stocks and preferred stocks.

These are general remarks. In specific cases they do not hold true. Wabash debentures are credited with a flimsy lien on Wabash proper. New York Central, Lake Shore, and other sterling debentures can only be junior to bonds outstanding

when the debentures were created. Wabash debentures are safeguarded in much the same way.

This is the accredited privilege of the debenture. Its mortgage should provide that if the directors or stockholders see fit, in later years, to issue new mortgages, the debentures must rank, *pari passu*, with the new bonds, and become a direct mortgage. Thus, when Philadelphia, Baltimore, and Washington, in 1903, made a $20,000,000 mortgage, the $4,930,000 debentures outstanding took immediate rank under this mortgage with the new bonds.

Of course, there are many classes of debentures and of income bonds. They vary with the strength of the company that issues them, with the good faith of the promoters who create them, and with the common sense of the public that buys them. No class of securities that can be called investment needs such careful selection and research. A single word in the indenture may make or ruin the bond in later years.

The phrase, "if earned," relating to the interest on incomes, is the great stumbling block. A suit is now pending against the trustees of the Wabash bonds, because some people think this interest should be paid before the directors are allowed to divert any income for capital purposes. In the same way, there has been temper and disappointment in Central of Georgia circles at times because of alleged diversion of income.

There is no fixed rule as to voting power of debentures and incomes. Wabash debentures vote. New York Central debentures do not vote. Most issues have no voting power. They are either bonds without a property lien or stocks without a vote.

As investments they vary, as a general rule, according to the revenue they pay, the surplus earnings of the company, the credit of the company, or the prospects for great earnings. Because they are bound to get the income, if earned, the non-interest debentures are subject to fluctuations quite as violent as those of the stock market. This class is purely speculative, far more so than are good stocks.

The leading debentures and income bonds known in the New York market, with current quotations and yield, where possible, are listed as follows:*

Debentures.	*Rate.*	*Price.*	*Yield.*
Atchison, series D	4	99	4.82
" " E	4	99¾	4.08
" " F	4	98¾	4.99
" " H	4	97½	4.62
C., B. & Q.	5	108	4.24
C. & N W., 1909	5	108	4.24
" 1921	5	110½	4.24
" conv.	5	103	4.36

* Not to-day's quotations.

Debentures.—Continued.	*Rate.*	*Price.*	*Yield.*
Long Island	5	110	4.43
N. Y. C., 1905	4	100½	3.82
Lake Shore	4	100⅜	4.02
N. Y. C., 1934	4	99½	4.05
New Haven, 1947	*3½-4	....	....
" 1914	4	103⅜	3.63
" 1954	3½	97¾	3.65
Richmond & Dan. (Sou.)	5	112½	4.25

* No quotation.

Incomes.	DIVIDEND. *Owed.*	*Paid.*	*Price.*
Cen. of Ga. 1st	5	5	92
" " 2d	5	2	68⅞
" " 3d	5	..	47
Mil., L. S. & W.	6	6	109
Peoria & Eastern	4	4	69½
Mex. Central 1st	3	..	21
" " 2d	3	..	16
St. L. S. W.	4	4	85
Texas Pacific 2d	5	5	93½
West Shore	5	..	40
Wabash deb. A	6	3	95
" " B	6	..	65¾
K. C. M. & B.	5	5	95
Wabash-Pitts. 2d	4	..	47

The price reflects the difference between the debenture and the straight income bond. The yield on debentures issued by the strongest roads in the country varies from 3½ to 5 per cent., the yield of 3.82 on New York Central 4's of 1905 reflecting the fact that within a year the bond will become $1,000 cash. New Haven debentures are in a class by themselves. A fair yield on good debentures seems to be about 4.25 per cent. On the other hand, there is hardly a good income bond in the country that cannot be bought to yield over 5 per cent.

The Wabash-Pittsburg bonds, the latest addition to the list of income bonds, remain on the list only until 1910, at which date they become a fixed-interest security.

In estimating the investment value of any income bond on the list the investor must gain an intimate knowledge of the finances, the policy, and the prospects of the corporation whose incomes he is considering. The income has no value merely because it is a bond.

Income and Debenture Bonds, Relative Status of.—*Question*—(1) What is the difference between an income bond and a debenture? As I understand it, the interest on these securities is not obligatory, but is dependent on the earnings of the company. (2) Is this correct, or is the interest ever obligatory? Is there any difference in the manner in which an income bond

and a debenture are secured? (3) Suppose a railroad has outstanding both incomes and debentures, the interest on which class would come before the interest on the other?—H. C. W.

Answer—(1) and (2) The terms are loosely used; the original "debenture" was a bond as to interest and principal, but without specific lien on property. The income bond was and is a full bond as to principal debt, but not for interest unless earned, also having no lien on property. The two classes of bonds are equally secured, but generally a debenture is safeguarded by a clause limiting the amount of prior bonds issuable, and making the debenture a mortgage issue before other bonds may be issued.

(3) Probably the debenture would be stronger, but there is no fixed law.

Land Grant Bonds.—A security of American invention, originally issued against lands granted by the Government in aid of railroad construction. As the lands are sold, the proceeds are applied to the payment of interest and redemption of the bonds. But few issues of these bonds remain outstanding.

Mortgage Bonds.—They are promises to pay a specified amount at a specified time, and interest thereon at a stated rate, and are secured by a mortgage covering all or part of the company's property. In case of default in the payment of principal or interest, the mortgage can be foreclosed under certain conditions, and the property sold for the benefit of the bondholders, or the company reorganized. In buying mortgage bonds, care should be taken to look into the terms of the mortgage, and to ascertain what provision it makes for the security of the bondholders. A first mortgage, as the name suggests, usually covers all property, right of way, real estate, used for whatever purpose, equipment, and all appurtenances. Sometimes, however, equipment is mortgaged separately, and equipment trust notes or bonds issued against it; terminal properties are segregated, and bonds covering the specific property take precedence over the lien of a first mortgage railroad bond. A first mortgage bond which covers all property is, of course, to be preferred as an investment than one which is not a lien on terminals that are essential to operation. Following first mortgage bonds, railways have issued second, third, and fourth mortgages, which, as their numbers imply, are liens on assets and income in rotation. Should the income of the railroad be insufficient to meet the interest on the second mortgage bonds and default occur, the second and succeeding liens would proceed to foreclosure and judicial sale. The sum thus obtained

would be applied first to the satisfaction of the principal and accrued interest of the first mortgage. Any balance remaining would be used for the payment of the second mortgage claim, and so on, to the satisfaction of the last mortgage, in the order of precedence. Should any residue remain, it would be distributed pro rata to the stockholders.

Mortgage Bonds, Three Classes of.—A New York bond house divides railroad mortgage bonds into three classes, as follows: Gilt-edged investments, from a 3½ to a 3.90 per cent. basis; conservative investments, 3.90 to 4.35 per cent. basis; and speculative investments, 4.35 per cent. basis and upward.

Mortgage Bonds in One Class.—General mortgage, consolidated mortgage, refunding and unified mortgage bonds may be put in one class. These bonds are usually issued under a "blanket" mortgage designed to cover all the property of the railroad, and serve the double duty of providing for extensions and betterments and for payments of prior lien bonds at their maturity. Such bonds are, of course, subsequent to all liens on the property previously imposed, but are a first mortgage on extensions constructed and equipment or other property purchased with proceeds of their sale.

New York Stock Exchange Bond Prices.—On the floor of this institution bonds are sold at "flat" prices—*i.e.*, if a bond is sold at 105 that price includes the accrued interest from the date of the last payment, and 105, plus the broker's commission of ⅛ of 1 per cent., is the net price paid by the buyer.

Outside Market Bond Prices.—Outside the Stock Exchange bonds are usually sold "with interest"—*i.e.*, if a bond is sold at 105 and interest the net price paid by the buyer amounts to 105 plus the amount of interest accrued on the bond since the last instalment of interest was paid.

Railroad Bonds and Guaranteed Real Estate Mortgages, Relative Merits of.—In 1906 there was a not unprofitable controversy between a New York bond house and a mortgage company dealing in guaranteed mortgages. The bond house started the discussion with the following statements: "Railroad bonds or real estate mortgages? The ideal investment combines ample security, a good rate of income, convertibility into cash, and promise of increase in value. The holder of a real estate mortgage is at a great disadvantage as regards the changing value of real estate. If the value of the property

upon which he holds a mortgage increases, the additional value enhances the security of the loan, but does not add to the principal invested; while, if the value of the property be impaired, not only is the security proportionately lessened, but, if the impairment is great, the holder is frequently compelled to take over the property. In other words, he receives no direct benefit from an increase in the value of the property, but has to stand the larger part of the risk of a decline in its value. On the other hand, well-selected railroad bonds increase in value with time, and all such increase goes directly to the benefit of the holder, giving him an opportunity to participate in the growth of the property. This brings an indirect income which frequently makes the net return upon bonds very large. In addition, railroad bonds are readily convertible into cash, and form an ideal collateral to be used as a basis for borrowing money. The importance of this feature is too frequently overlooked."

The mortgage company replied: "Guaranteed mortgages or railroad bonds? Security: Guaranteed mortgages vary from 50 per cent. to 66 per cent. of the selling value of the real estate pledged. Railroad bonds have been usually issued for 100 per cent. or over of the cost of the railroad. Some railroads have spent money in excess of the bond issue, thus making an actual margin; others have not. After the panic of 1893, defaulted railroad bonds caused about two-thirds of the railroad mileage of the United States to be placed in the hands of receivers. Income: Guaranteed mortgages net 4½ per cent., and are tax-paid. High grade railroad bonds yield 3¾ per cent. to 4½ per cent., and are subject to the personal tax of about 1½ per cent. per annum. Convertibility: Speculation in guaranteed mortgages does not exist because of the non-fluctuating character of the collateral. Railroad bonds when converted into cash are controlled entirely by market conditions, which, since 1902, have generally been unfavorable, as, for example: New York Central 3½'s—109½ in 1902, 91⅞ in 1906; Pennsylvania 3½'s—112⅝ in 1902, 96 in 1906; Chicago & Northwestern General 3½'s—106⅝ in 1902, 95 in 1906," etc.

The bond house rejoinder was: "Railroad bonds or guaranteed mortgages?"

"*Official Figures.*—The last published report of the Interstate Commerce Commission, year 1904, page 56, shows that the total railway capital of the United States was $13,213,124,679, of which $6,873,225,350, or 52.02 per cent., was in the form of funded debt, and the rest in capital stock. Page 60 shows that 57.47 per cent. of the stock was paying dividends at the average rate of 6.09 per cent.

"From last annual reports:

	Par Value of Bonds Outstanding.	*Approx. Mkt. Value of Stock Outstanding.*	*P. C. of Bonds to T'l Value.*
Pennsylvania Railroad Co........	$191,852,447	$422,800,000	31.2
New York Central................	230,414,845	234,000,000*	49.6
Illinois Central..................	154,894,275†	166,250,000	48.2
Great Northern.................	100,227,939	495,000,000	16.8
Union Pacific....................	223,128,000‡	464,500,000	32.4

* Includes $30,000,000 recently issued. † Includes $10,000,000 leased line of stock. ‡ Report for 1906 not issued, figures taken from *Commercial and Financial Chronicle.*

"It is obvious from the above table that the poorest bond of any of these standard roads is protected by more than 100 per cent. equity, while in the case of the Union Pacific and Pennsylvania two-thirds, and in the Great Northern four-fifths of the present market value of the property could be erased before the poorest bond would be impaired.

"In the case of guaranteed mortgages, while it may be true that they vary from 50 per cent. to 66 per cent. of the present appraised value of the real estate pledged, it is quite probable that this represents 100 per cent., or even 200 per cent., of the value five years ago, and may be less than the selling value tomorrow.

"Real estate has enjoyed a phenomenal advance in the last few years, and prices in many sections have passed the point of reason. To loan money on present values, even to the extent of only 50 per cent., may prove a dangerous undertaking.

"Real estate speculation, it is well known, is the most pernicious of all speculative manias, and brings with its collapse the worst effects, because no short selling exists to temper the fall, and the immobile form of capital makes liquidation impossible.

"In the event of a serious decline in real estate values, the holder of a guaranteed mortgage might be compelled to test the value of his guaranty, and, consequently, he should know before purchasing how far the capital and surplus of a company whose guaranty he has accepted would extend in liquidating the mortgages which they have guaranteed. How many look into this point?

"If a railroad, for instance, should have guaranteed a $50,000,000 bond issue with a capital of only $5,000,000, or even $10,000,000, it is not conceivable that good judges of bond values would consider that the guaranty appreciably strengthened the bonds. But a railroad guaranty is usually a far different thing."

The same mortgage company in its advertising literature said,

in reply to the self-asked question: "What are the weak points of railroad bonds?"

"Chiefly the fact that expert knowledge is needed to distinguish good from bad, the old first mortgage bonds being largely hidden away in strong boxes and the market being flooded with second, third, and fourth mortgage bonds, consolidated bonds, branch line bonds, collateral bonds, bonds with no collateral, car trusts, 'income' bonds, and countless classes of bonds more attractive in name than in substance. The evolution of railroads from small lines, bonded at cost for construction, into great systems, whose extensions and improvements call continually for new capital, has taxed the ingenuity of financiers, with the result that the supply of railroad bonds runs all the way from very good bonds to very poor ones. The general tendency has always been toward overcapitalization, as is evidenced by the disgraceful spectacle in recurring panic years of two-thirds of the railroads of the United States in the hands of receivers."

Commenting on this *The Wall Street Journal* said: "This is pungent criticism. The mortgage company is, of course, arguing as an advocate of real estate bonds, property investigated by an audit or guarantee company, as against railroad bonds quoted in the world's markets. There is undoubtedly considerable truth in the criticism.

"Expert knowledge is needed to distinguish good from bad where the bonds approach the dividing line. Any investor, however, can distinguish the very good from the very bad. Absolutely the same criticism applies to all other bonds, for there are good loans on real estate and there are bad ones, and expert knowledge is needed here also. The endorsement of a good guaranty company on real estate mortgages supplies that expert knowledge. Similarly the recommendation of a conservative banking house supplies the knowledge in the case of railroad bonds. In each case the investor has to pin his faith either to the guaranty company or the banking house.

"Undoubtedly there are floods of bonds on the Wall Street market which are not first mortgage bonds. The characterization of these bonds contained in the paragraph quoted is not, of course, carefully written. For instance, 'car trusts' are thrown in between 'bonds with no collateral' and 'income bonds.' In point of fact a car trust is practically a very careful chattel mortgage, and its holder really stands ahead of the first mortgage bondholder. Atchison car trusts were paid during the receivership. Car trusts never default, because if they did the road would lose the equipment and go clean out of business.

"The critic is, however, quite right in his inference that modern finance has weakened the meaning of the term 'bond.' He has successfully demonstrated that the most careful discrimination must be used in buying railroad bonds. There is not one of the classes specified in the paragraph which does not contain some really excellent bonds, but they must be carefully selected.

"Such criticism, however, need not alarm the bondholders at large. It does not detract from the safety, or attack the strength, of the bonds to which the Wall Street public has been accustomed to apply the adjective 'good.' Railroad bonds are still bonds, and will continue bonds until the railroads cease to be property. In that day real estate will be no safer than the railroads."

Railroad Bonds, Stability of.—The stability of railway bonds as an investment is demonstrated regularly each year as reports appear. In no section of the United States is the annual payment on railway bonded indebtedness less than 4 per cent. except one.

In New England nearly 5 per cent. is paid on both bonds and stock, and the stock earns nearly as much as the bonds, the payments being 4.69 per cent. on bonds and 4.82 per cent. on stock. In the old and favorably situated Middle States bonds yield 4.15 per cent., but slightly less than 3 per cent. is paid on the stock. The latter represents rather the past than the present, as some of the non-paying dividend lines are in a position to pay, and will no doubt begin doing so next year. The Central Northern group pay 4.22 per cent. on bonds and 3.65 per cent. on stock, and in the South Atlantic States the yield is 4.41 per cent. on bonds and 1.79 per cent. on stock. Southwestern roads have greatly improved their earning powers since the depression of 1893–96, and now yield 3.96 per cent. on bonds and 2.16 per cent. on stock. The Northwestern field, like New England, shows a larger yield on stock, 4.09 per cent., than on bonds, which pay 3.16 per cent.

The Pacific State railroad bonds yield 5.66 per cent., the highest rate of any group, while the stocks pay but 0.07 per cent., the lowest rate, the result of a different policy of the management from that of any other part of the country. Railroads of the Gulf States pay 4.34 per cent. on the bonds and 1.75 per cent. on the stock.

The public hold about nine-tenths of the bonded issues of railway corporations, and the railways own the balance. Of stock issues, the railway corporations own more than one-fourth. The aggregate holdings of railway bonds by the public is about

five billions of dollars, and of stocks one and three-quarter billions. In 1895–96–97, as the result of the 1893 panic, less than 30 per cent. of outstanding stock paid dividends. This was increased to 33.74 per cent. in 1898, and to above 50 per cent. in 1903; but it was not until 1901 that more than half the railway stock in the country yielded a return to holders. The improvement in the yield on stocks is important to holders as permanently strengthening the position of their securities, giving them greater value and a wider market.

Registered Bonds.—This bond is payable only to a specified person or persons. It becomes negotiable only when endorsed by the proper person and the endorsement is properly witnessed. The name of the owner is registered on the books of the bond-issuing company, and payments of interest are made by check payable to the owner and mailed to him direct. In order to receive the interest, the buyer of a registered bond should not fail to have it transferred to his name before any payment of interest is made. The matter of transfer should be attended to promptly. Registered bonds are not as easily negotiable as coupon bonds, and usually the market price is slightly lower than the coupon form.

Relative Merits of Bonds.—A successful banker who has made a specialty of public service securities on the general subject of investments, said: "The highest grade of investment, at present, of which I have knowledge, is that of United States Government bonds, especially the 2 per cent., which, at the present market price, is much less than 2 per cent. on the investment. England's consols sell, generally, on about a 3 per cent. basis, or less.

"Other than Government, State, county, or municipal bonds, trunk line railroad bonds are the favorable investment in this country; and I infer that this is due largely to two principal causes: first, perpetual franchises; and secondly, the cause of the magnitude of investment, requiring a vast number of holders, who are more or less familiar with the investment, and therefore make, at all times, a market for the securities.

"Railroad bonds dealt in on the New York market vary in the returns which they yield, dependent upon varying conditions. In the case of industrial corporations, the conditions vary still more widely. I have been engaged in the management of public utility corporations for thirty-nine years, and the rate of the return upon the investment exacted by investors is high.

"For instance, the 5 per cent. sinking fund bonds of the

United States Steel Corporation yield a little over 5 per cent. upon the present market value; and in 1904 they yielded over 6 per cent. upon the market price. The bonds of the great majority of the recognized industiral corporations of the United States now sell at prices which produce a return of from 5 to 6 per cent. per annum. Such bonds yielded a lower return upon the present market prices than in 1904, when business conditions were not so favorable. But bonds being an underlying or preferred security, sell at a lower basis of earnings than industrial stocks, few of which sell at a price netting less than 7 or 8 per cent. on the investment.

"Many of the stocks and bonds of gas companies, for instance, have in the past sold above par, and have paid a low rate on the investment; but in such cases the prices have been based on the assumption of perpetual franchises, or of such consideration of public authorites as to warrant the belief that the property would continue to be treated with the same consideration and right and protection as is accorded to other classes of investments."

Safe 5 Per Cent. Bonds.—There is hardly a bond in the Wall Street list which can be conservatively classed as "safe," and which will yield 5 per cent. To the widow and the trustee of the orphan's estate, it can be said without hesitation that 5 per cent. cannot be obtained with safety sufficient to justify the investment of such funds in such bonds. To the average investor, half a dozen issues can be pointed out which yield 5 per cent. or slightly better, and which appear to have in them sufficient stability and merit to justify their purchase. Equipment trust notes, the notes issued by the railways in 1902, maturing from now to 1910, and a few scattered issues of bonds which were put out in a bad market and have not yet recovered from the effects, are the securities generally pointed out for such investment.

It is not in the nature of things that gilt-edge bonds should be quoted on a 5 per cent basis. If they were, the national banks and the trust companies and other institutional investors would snap them up. Even 4 per cent. is difficult to obtain on really gilt-edge bonds. Three years ago 3½ per cent was considered quite good, but the marked decline in high-priced bonds, led by British consols, made 4 per cent. a fair return. This collapse has not been recovered to date, and one of the best reasons for this failure is the fact, noted above, that the average investor to-day is looking for 5 per cent.

It is pertinent to suggest to the investor who is looking for 5 per cent. investments that this class of bonds is apt to break

very badly in a very bad market—such, for instance, as came in the fall of 1902. An investment in them might, therefore, net a very heavy loss at some time in the next few years. This contingency cannot be adequately guarded against. The best and safest precaution against it is to select for such investment 5 per cent. bonds of a fairly strong railway corporation, which are selling a few points below par, or at par, and bonds that mature within, say, ten years. Such a purchase is safeguarded against loss in principal, except through receivership. If great decline comes, these bonds are not apt to decline so fast as a long-term bond of the same class, for the reason that a point of decline in the short-term bond means a great advance in the yield, if held to maturity. In any case, the investor can put his bonds away, and fear only a default. Panic cannot touch him, for Wall Street panics practically never break railways. He can be sure that in ten years' time he will get back what he put in.

Beyond such caution, the buyer of semi-speculative bonds cannot do much to provide stability for his investment. Stability is properly an attribute of the high-grade bonds. It is true that the heavy losses that are now faced by 1902 buyers of the high-grade bonds of Lake Shore, New York Central, Northwestern, and other sterling railroads, are an argument for the lower grade bonds. But it is also true that the lower grade bonds are now standing at high prices. To get high yields, one must go beyond even the middle-class bonds, which yielded 5 per cent. or better in the spring of 1904. Therefore, great caution must be observed by buyers for a 5 per cent. revenue.

Small Railroads, Bonds of.—As a rule, bonds of very small railroads are not recommended for permanent investment. Such roads are, of necessity, more subject to violent vicissitudes than larger roads.

Short-Term Notes.—The majority of short-term notes issued by railroad and industrial corporations are secured by collateral, although some are direct obligations on property. The denominations are usually $1,000 and $5,000, but occasionally $500 notes are sold; denominations higher than $5,000 are more frequently met.

Along with the recent flotation of so large an amount of short-term securities by railroad and industrial corporations, says *The Wall Street Journal*, there has arisen a question which is troubling investors and bond dealers alike. This question concerns the position of such obligations as are said to be unsecured, or, in other words, such as are based entirely upon the

credit of the issuing company. The inquiry is frequently made, What would become of these unsecured notes in the event of a receivership?

Replies to the inquiry come in two forms, the one directly opposed to the other, and there seems to be no immediate prospect for the critics who hold the opposing views to concur. The difficulty which is encountered in the solution of the problem is that there is no precedent by which one can be guided. The unsecured, short-term note is of comparatively recent origin, and did not exist at the time when the railroads were passing through the long period when receiverships were almost daily occurrences.

On one side of the question there are those who do not hesitate to say that they would by all means give preference to the unsecured note, as distinguished from the note secured on collateral, their theory being that the unsecured obligation would, in the event of a receivership, doubtless be treated as a current liability, or floating indebtedness, and that it would, therefore, as has almost always been the case, be taken care of ahead of the mortgage bonds outstanding. Of course, there is the possibility of even floating debt being scaled down in the settlement under receivership—this was done in the case of the Reading—but only in the case of an unusually serious financial wreck would this action be found necessary.

Those who hold the opposite view say that the unsecured note is junior to the mortgage bonds, and that in a settlement could only receive what remained after the holders of the latter securities had been satisfied. In other words, they give preference to the collateral secured note, about which there does not seem to be much question as to its position.

In the first case, the only duty of the prospective investor would seem to be to satisfy himself that the note was a properly drawn legal instrument which could not be upset in the courts. In the second case, it is clear that the duty of the investor is to satisfy himself that the collateral upon which the note is secured will be worth enough to cover the face value of the notes, in order to insure himself of complete protection.

Collateral notes often possess all the characteristics of gilt-edge securities. As an instance of this, the Chicago & Alton 4's and the Chicago, Rock Island & Pacific 4½'s, both due in July, 1907, may be cited. Both issues are secured on bonds which are legal for savings-banks in New York—the Chicago & Alton Railroad refunding 3's and the Chicago, Rock Island & Pacific Railway first and refunding 4's, and were accepted by the Treasury as security deposited against United States deposits. Frequently such notes carry a guaranty as an additional

security; for example, the 4½ per cent. notes of the Pennsylvania Company, which are secured by stocks, and have principal and interest guaranteed by endorsement by the Pennsylvania Railroad Company.

Investors have always looked with favor upon the short-term security in the form of the equipment note, the characteristics of which assure its safety as to principal and interest in almost any contingency that might arise.

Status of First Mortgage Bondholder.—The first mortgage bondholder is in the position of a man who lends money to a corporation, repayable at a stated time and at a certain interest rate, the condition being that, if interest or principal is not paid when due, the bondholder owns the property.

This is a simple fundamental fact. It underlies the credit of every corporation. It is in this right of ownership under default that the essence of the genus bond exists.

Reorganization, as applied to corporations, is supposed to mean the building up of a new corporation by taking the assets of the old and issuing against them new securities. The legal presumption is that the old bondholders, the technical owners, are satisfied in full, or in so far as the value of the assets will meet the bonds.

Really, reorganization has come to mean a process by which the technical owners are likely to be frozen out of a part of their heritage. They are told that it will be to the interest of the company not to assess the stockholders, and are therefore asked to take something or other that will amount to, perhaps, 80 per cent. or 90 per cent. on the face value of their bonds. In other words, they are asked to pay the assessment of 20 per cent. or 10 per cent., as the case may be, so as to avoid the unpleasant and impolite necessity of asking the stockholders for any more money.

The stockholder, be it understood, is generally represented by the reorganization committee, headed by a powerful banking house, and the most potent inducement held out to the bondholder is that if this plan goes through, the "powerful interests" in question will lend such credit to the new corporation that the stuff he gets for his bond is certain to ultimately appreciate greatly in value, etc.

In about nine cases out of ten the bondholder takes what he gets and is thankful. In the tenth he becomes what is technically known as an "obstructionist," and sometimes it is shouted from the housetops that "he wants to be bought." These are frequently found, when closely investigated, to be only poor people who wanted $1,000 for their bonds because

they knew the bonds called for that amount, and because they knew that the value was there. They lack discrimination. They fail to recognize that the unlucky speculator who bought the stock at 10 as an attractive gamble, really should not be compelled to spend any more money on what was, manifestly, a very bad bargain. Bondholders have actually been known to insinuate that it would serve the speculator right if he had to supplement his five-point margin with a ten-point assignment.

Suppose, for instance, that a corporation has $16,500,000 of first-mortgage bonds scattered about the United States, and fails to pay the interest at the stated time. The assets of this corporation are worth, if sold for the highest price obtainable—not under a snap auction sale, but by real business men, in a real business way—over $16,500,000. The theorist will say off-hand that the bonds are worth par. Strange to say, they linger in the 80's. That is because a "protective committee" has been formed in the interest of the stockholders to reorganize the company.

The plan comes out. It provides for the bondholders, and every stockholder and every member of the protective committee says the provision is liberal. The only person who thinks it isn't is the bondholder, who still vaguely wonders why he can't get at the thousand dollars the company owes him. In time, perhaps, he begins to think the reorganization committee has something to do with it, and there is a suit at law, generally settled out of court.

There have been, quite recently, several cases of reorganization without assessment on the stock. The company starts up with new working capital, and no one seems to be surprised that the reorganizers have managed, apparently, to make something out of nothing. The old bondholder is about the only man who really knows where the money was found, and he is generally reluctant to tell, for it makes him look ridiculous.

Theoretical and Market Value of Bonds.—It is usually the case that the absolute or theoretical value of a bond differs more or less widely from its market value. This is far less true of Government bonds than of others with greater uncertainty as to solvency. The premium demanded by a bond is determined, first, by its solvency—its certainty of full redemption; second, by the rate of interest that it bears; third, by the time it has to run; fourth, by any outside circumstances—permanent or passing—which may make its possession desirable or necessary. The extent to which the rate of interest called for by a bond influences the premium, depends upon how much that rate exceeds the recognized actual or standard value of money.

Terminal Bonds.—Terminal bonds, secured on city and suburban terminal properties used by big railroad systems, form a small but interesting class of investments which appeals directly to the most careful class of investors. Terminal first mortgages on main line property are generally classed as gilt-edge when guaranteed by any railroad using the terminals. How vital a matter the safety of these mortgages is to the railroads may be aptly illustrated by the fact that Erie paid all dues to Buffalo Creek even through the Erie receiverships.

Terminal mortgages are very various, and some are very peculiar. They may be classed as follows:

1. Mortgages on terminal property used by railroads, but not owned or controlled by railroads, and without guarantee. Chicago Terminal Transfer first 4's, Columbus Terminal 5's, Northern Pacific Terminal 6's, are examples. This is the weakest class of terminal bonds.

2. Mortgages on terminal property not owned but used by one or more railroads, and guaranteed by tenants. Terminal Railroad Association, of St. Louis, 4's, etc., Buffalo Creek 4's, are examples. Such bonds are usually very strong.

3. Mortgages secured on terminals owned by railroad companies, and either issued directly by the railroads or guaranteed by the railroads. Wabash Terminal 4's, Columbus, Connecting & Terminal 5's, Delaware River Terminal 5's, New York, Lackawanna & Western Terminal & Improvement 5's, Long Dock 6's, Chicago, Milwaukee & St. Paul Terminal 5's, are good examples. This is the largest class of terminal bonds. Its strength varies with the strength of the guarantor company and the location of the terminal.

4. Mortgages partly secured on terminals, issued by the railroads, and generally covering mileage and other property. Erie general and prior lien 4's, Rock Island first and refunding 4's, are good examples. Their strength is dependent on the credit of the companies.

The following list contains most of the terminal bonds, with dates and prices, dealt in on New York markets:

Bond.	Rate.	Date.	Price.	Yield.
CLASS NO. 1.				
Chicago Term.	4	1947	81	5.10
Northern Pacific Term.	6	1933	*119	4.89
CLASS NO. 2.				
Term. R. R. Assn., St. L. 1st	4½	1939	109⅜	4.00
First con.	5	1944	118⅜	4.12
Gen. ref. sinking fund	4	1953	100½	3.99
Mer. Bridge	5	1930	112⅛	4.24
N. O. Term. 4's	4	1953	*98	4.10

* Approximate.

CLASS NO. 3.

Bond.	*Rate.*	*Date.*	*Price.*	*Yield.*
Columbus Conn. & Term.	5	1922	112	4.10
C. of N. J. Dock & Imp.	5	1921	114	3.82
Erie Long Dock	6	1935	132	4.18
N. Y., Sus. & W. Term.	5	1943	117	4.14
N. Y. Lack. & W. Term.	4	1923	105¾	3.58
Wabash Term.	4	1954	96	4.15
C., M. & St. P. Term.	5	1914	111	3.68
Reading Del. R. Term.	5	1942	*112	4.35

* Approximate.

The fourth class is very broad, and the bonds are like straight mortgage securities on mileage. They have no place in the above list.

It will be noted, of course, that the list above does not include bonds or by any means all terminals. Omaha, Pittsburg, Peoria, Memphis—in fact, probably a majority of the cities, have terminal companies that lease facilities to railroads. In most cases the bonds of these companies are either held by the original incorporators or are very narrowly distributed.

It will be noted that the value of the security, or property, under a terminal mortgage is apt to increase much faster than the selling value of a railroad property itself. For example, the terminal property owned by Central of New Jersey in Jersey City, by New York Central in New York, by 'Frisco in Memphis, St. Louis, and Chicago, by Pennsylvania and Baltimore & Ohio in Pittsburg, could not be duplicated to-day at three times the price at which it was originally bought and bonded. The St. Louis Terminal bonds rightly sell high, representing as they do a property that is almost a monopoly and defies duplication, and also the guarantee of many railroads. Similarly the New Orleans Terminal bonds, the Wabash bonds, and others represent the cost of property that could not be duplicated in these cities.

Underlying Railroad Bonds.—When a company has made two issues of bonds, one issue secured by a first mortgage on all or a part of its property, and the other issue secured by a second mortgage on the same property, the bonds secured by the first mortgage are designated as underlying bonds, inasmuch as they underlie those secured by the second mortgage.

Varying Degrees of Underlying Security.—Opinion of a banker: "During the consolidation of the last seven years, of railroads as well as industrial corporations, a great many collateral trust loans having a long time to run have been made, and the public sentiment against these consolidations has been extended to the creation of the collateral securities largely con-

temporaneous with it. This sort of security, however, is not quite as new as most people seem to believe. All the large railroad corporations which were reorganized in the '90's had issues of collateral trust bonds or notes outstanding at the time, and as we can always learn from the past, it is interesting to analyze the treatment of these securities during these reorganizations. It is found that in each case they were dealt with in accordance with the merit of the underlying security—that is, on a basis of the actual intrinsic value of the collateral.

"The past history of collateral trust notes and bonds merely goes to prove that like first mortgage bonds, or any other security, there are all kinds—good, bad, and indifferent—and the prospective purchaser of this class of securities, the same as that of any other bonds or merchandise, should investigate before buying.

"Leaving aside for the moment the merits of the security which forms the collateral, but merely looking at the facility for getting possession of the collateral in case of default on the part of the maker of the obligation, the collateral trust bond is really preferable to a first mortgage which may be secured on property in different States or a great distance from the financial centers. In order to foreclose a first mortgage, receiverships and tedious and expensive proceedings are generally necessary, while in the case of a collateral trust bond the pledged securities can be easily reduced to possession by putting same up at auction in one of the financial centers."

PART IV

Real Estate Mortgage Bonds

Real Estate (Guaranteed) Mortgage Bonds.—The careful buyer of investments of this class will investigate for himself the character of the property behind his bond. The range of securities offered is decidedly broad. He should also remember that in the event of the mortgage expiring the power of substitution is to be considered together with the relationship of the mortgage company to this power. Also he should investigate regarding the nature of the guarantee. Is it an unqualified guarantee? Some companies except "any depreciation in the mortgage security caused by fire, explosion, riot, war, tornado, earthquake, defect in title or prior encumbrance." When properly scrutinized bonds of this character are to be highly

commended as safe and desirable investments for men, women, and fiduciary institutions.

Real Estate Mortgage Bonds, A Consideration of.—There are in Wall Street and in all other security markets a great many bonds that do not fall under the usual classification of railroad, industrial, or municipal bonds. Few of these issues are listed. The Provident Loan Society has an issue of 4½ per cent. bonds on the New York list, but they are very inactive. The characteristic of such issues which stands out most prominently is the fact that the trading in them is confined largely to a very small and narrow class of investors.

More recently there has been much comment upon the mortgage bond as an investment. The mortgage bond, *per se*, is a very desirable security, when the property upon which the original mortgage is based is in an improving locality and is itself well beyond the face value of the mortgage. The buyer of the mortgage bond does not go behind the guarantee. He is not a real estate investor or speculator. He buys a security that is a lien on mortgages on real estate. The original mortgage he does not see and does not participate in directly. He takes the word of the mortgage bond company that the mortgages are good. He is the buyer of a collateral trust mortgage security.

But two questions need be asked: "Who appraised the value of the mortgages under my bond?" And, "Who guarantees the principal and interest of this security that I am buying?" If these two questions can be satisfactorily answered there is nothing the matter with the real estate mortgage bond as a permanent investment.

In a bond market almost universally expanded the mortgage bond has some advantages over the railroad or industrial mortgage. At the present moment the bond of this sort, well secured and satisfactorily guaranteed, is probably cheaper than the railroad bond to yield the same return. Experience has shown that the real estate mortgage itself is not subject to fluctuations with the Wall Street market. The mortgage bond is likely to follow this tendency toward firmness in a bad Wall Street market. When the Wall Street market gets high there is always a chance for great declines even when the country is perfectly prosperous. A bad stock market break is apt to bring on the market considerable blocks of railroad and industrial bonds that have been used as collateral for stock market loans. Liquidation in listed bonds is generally heavy in such periods.

The principal fault of the mortgage bond becomes a virtue

at such times. Their market is narrow. They are not listed, and they are not generally held by people who have stock market loans on call. It is probably safe to say that not 1 per cent. of the mortgage bonds held in New York could be found in the loan collateral for call funds. In a tight money market here the market, narrow as it is, would probably continue about the same for such bonds just as it would for real estate mortgages.

The conclusion from all considerations is that the investor who does not want to turn over his investments in the market, who wants stability without any excitement, and who does not want to keep track of the price of his bonds through daily printed prices, may at this time find what he wants in such bonds. For the average business man who likes chances of big profits in addition to his interest there is little to recommend such bonds. The one criticism that is at all times pertinent with regard to them is that when it comes to selling them the holder must go looking for a purchaser. This fault they share largely with the municipal bonds of small localities and with all real estate mortgages. Probably they are better than the direct mortgage on real estate in the matter of market.

Real Estate Mortgages Foreclosed.—Investors should keep in view the serious fact that after they have been compelled to take in a property under foreclosure proceedings the property usually begins to deteriorate in value. The debtor, in parting with his title, gives up his personal interest in its care and protection, preventing the owner from doing the very thing he ought to do—rather restore and bring back the value of the same to its normal condition. As a rule, in the absence of some incentive, a man that has seen his property sold from under him will not do much toward the enhancement of its value. He has lost courage and heart, and is in no mood for "working for the other fellow," much preferring to move away and "start over again." This phase of handling foreclosures should always be taken into consideration, for it helps "work out" the financial end of the problem.

Real Estate Mortgages "Slow Assets."—The real estate mortgage has always been classed as a "slow asset." This because it does not possess the qualities of a "listed" security. The pre-requisites to the latter are quite well known, but it may not be quite so well known that there have been known to be certain manipulations by those charged with the duty of passing on the qualities of securities that have been presented for listing that have resulted in the lodgement of some

unworthy issues where they ought not to be. It is certainly true that a mortgage on a well-occupied and profitably managed business block made on a 30 per cent. conservative valuation will find a ready purchaser where there is knowledge of the security and money to take the loan. For the very same reason a listed security finds ready buyers—the latter believe that there is ample property behind the security and that the income is a continuing one.

In this connection it is well to note the experience of John Schuette, president of the Manitowoc (Wis.) Savings-Bank. He says:

"Good real estate mortgages, even if not due, are a quicker asset in a financial panic, when safety is the main question, than a note or discount, even if due, as at such times a banker in most cases does not expect payment, but only extension or renewal. I never lost a dollar on a real estate mortgage, and in the panic of 1893 they proved to be the best asset of the banks on which cash could be realized."

Farm Mortgages.—For fifty years the farm mortgage stood for stability, and ranked with the Government bond as a substantial investment. Then, with rapid settlement in the prairie West and buoyant exploitation of the high plains, it became a favorite of the boom-time promoter, and, so far as the Western loan was concerned, fell from its respectable estate. It has taken years to recover confidence, and in the meantime the West, which is necessarily the principal field for the farm mortgage supply, has undergone vital changes, making practically a new situation, and one not thoroughly understood by the average investor.

In the West, a mortgage on a farm is not considered a sign of failure. It is rather an indication of progress. It is evidence that the borrower believes himself capable of getting out of the land he is thus enabled to control more than the interest on the loan. On this basis the West was settled.

It is a long path from barren homestead to competence. Those who trod it spent decades in accomplishing results where their successors have spent only years The latter drew on the savings of the older communities of the East, and with this loan fund built up and developed the land at a rate surprising alike to themselves and to the East. As Illinois, Indiana, Ohio, and other States of the older West became wealthy, mortgages became fewer, and the farm-mortgage broker moved West with the tide of population. The vast area between the Missouri River and the Rocky Mountains was, and is, the loan field of the nation. Here has been the scene of its striking features.

The period of plains development, from 1879 to 1890, was marked by a notable extravagance in mortgage-making. Loan companies were organized, their business being to place Eastern money on Western farms. They reaped commissions at both ends—from the borrower and from the lender—and waxed fat. Anybody could borrow of them; indeed, they beseeched the borrowers to place morgages on their farms—the more mortgages, the more fees. They had their offices in the cities, and their field men were clerks who did not know a sand-hill pasture from a bottom-land garden. The appraisements were absurd, the terms easy, the interest rates high. The mortgage notes themselves, gorgeous with gold and green ink, had all the appearance of stability, as if the strength of the security depended on the attractiveness of the paper.

The East fairly grabbed for these mortgages. "I found drafts, money orders, and currency heaped on my desk every morning," said the secretary of one of the companies. "I could not loan the money as fast as it came in."

Most of the companies "guaranteed" the loans; many held the original papers and issued debentures against them. These sold equally well. Then came the hot winds and the exodus. In half a decade a quarter-million people moved out of western Kansas and western Nebraska—most of them left behind mortgaged farms. In thousands of instances the land was burdened with a loan greater than its value in the market; the settler had simply sold out to the Eastern investor.

It was this bit of history that made many a hard-working New Englander mourn his savings of years sent into the Golden West, only to get him a bit of buffalo-grassed sod in the middle of the township of Nowhere. He called on the loan companies to make good their "guaranty," and the companies promptly went into the hands of receivers—practically all of them. Then the investor apostrophized the Western loan field and waited.

Foreclosures came thick and fast during the 90's. Since then they have been scarce. Many a Kansas and Nebraska county which formerly had hundreds of sheriff's sales every year now does not average a half-dozen, and these are usually in the course of settling some estate. The new era of mortgage-making brought by the good times changed the methods of Western borrowing. The life insurance companies became the largest loaners on farm mortgage securities, and instituted system in placing loans, both in the application and in the collection. Individual investors, unless handling large sums for themselves or for their customers, found it less remunerative than before. Formerly 7 per cent. net could easily be secured; now it is only in portions of the West that even 6 per cent. net can be

obtained. Most of the loans to-day pay but 5 per cent. net to the investor. Speculative stocks, that formerly paid nothing like the return of the farm loan, now give practically as good interest, taxation considered, and investors are less likely to take the real estate security for the placing of their funds. The life insurance companies outside of New York, however, seek permanent and non-fluctuating investments, and the Western companies, particularly, have turned to the farm mortgage. By organizing a field force, with conservative State managers who are paid salaries and not commissions, the business is handled with regularity, the chief difficulty in these days being to keep the money loaned.

The census of 1890 included a compilation of information regarding the mortgage indebtedness of the nation. It is unfortunate that no such information was secured in the census of 1900. Some basis of comparison may be found, however, in the report on free and encumbered homes. In 1890, the number of farms free of encumbrance was 2,255,789; encumbered, 886,929. In 1900, the free farm-homes, 2,415,995; the encumbered, 1,093,235. It is probable, however, that the average mortgage was smaller at the latter date. The mortgage debt on farms, January 1, 1890, is given as $2,209,148,131, an increase in the decade preceding of 41.54 per cent. Kansas, South Dakota, and Nebraska ranked highest in the percentage of mortgage debt, but these states have in the past decade largely decreased their indebtedness.

Some other interesting figures are given. For instance, the average interest rate on all mortgages in the country was 6.6 per cent.; on lots, 6.16 per cent.; and on farms, 7.36. The average life of the mortgage, 4.54 years; the average farm loan, $1,032. For the purchase of land, 80.13 per cent. of the mortgages were given, and if the purchase of implements, farm animals, etc., was added, the percentage rose to 89.82 per cent. The mortgage thus has become merely the renting of money for use in farming, so far as this kind of loans is concerned, with this advantage: the renter is allowed all the excess above the stated interest. During the past decade of agricultural prosperity in the Middle West this method has given a remarkable opportunity to the farmers for obtaining homes for themselves and their families.

Western farmers have grown rather particular about their indebtedness. One of the common requirements of the modern mortgage is that the mortgagee shall accept any portion of the principal at the time of any interest payment. This means that the harvesting of a good wheat crop, or the fortunate sale of a bunch of cattle, may wipe out the debt, and the loan agent

must find another borrower. However, one insurance company has $40,000,000 in Western farm-mortgage loans, and the interest thereon is sufficient to pay all its death losses. Another company has $99,000,000 in these loans, scattered over the Mississippi Valley. The larger sums are in Illinois, with about $28,000,000; Minnesota, with $10,000,000; Missouri, $11,000,000; Iowa, $10,700,000; Ohio, $8,000,000, and lesser amounts in a dozen other States. It places approximately 4,000 farm-mortgage loans every year, and has in its history loaned $250,000,000 in this way, with practically no loss. A report in the "Annals of the American Academy of Science" gives the amount of mortgages held by the life insurance companies at $490,632,508, or 27.7 per cent. of the companies' assets. This, however, includes loans on city property as well as those on farms. The percentage is second only to that invested in bonds, indicating the partiality for this form of investment by the most conservative of investors.

The insurance-company loan is safeguarded in every possible way. The interrogatories of the application cover four large pages, and include everything from the the size of the borrower's family to the use he proposes to make of the money. They even inquire into his habits and his standing in the community; for the well-informed investor realizes that the best part of his security is the personality of the borrower.

Thus it happens that the insurance companies have few foreclosures, and practically no losses on this class of investments. Of recent years the value of land has increased so rapidly that every loan—made, as these investments are, on a basis of 40 per cent. of real value—became "gilt-edged," and was the best possible security.

Had the investors who made loans on lands in the high plains, and virtually bought the farms offered as security because the loans were so greatly in excess of the usual limit of 40 per cent. of real value, kept the lands on which they foreclosed, they would have nearly "played even" now. The appreciation of land prices has been so considerable that the loan would have been repaid. Few of the original mortgagees have profited by this advance. Shrewd Westerners have purchased the old mortgages, have hunted up the original owners and secured quitclaim deeds, and have generally cleaned up the old mortgage-loan business at a large profit through the subsequent selling of the properties. The original investors have been the losers, though the discouraged settlers, who "moved on" after a vain trial at making a living on the open plain, should be likewise given some pity. It was not the settler's fault that excessive loans were made; he shared his exuberant hopes of prosperity

with the real-estate agent. The representative of the loan company, eager for a large commission (based on the size of the loan), was primarily responsible.

Realty loan agents have been, in later years, endeavoring to perfect a plan by which the small investor may have a chance. The man with $10,000 has abundant opportunity to make satisfactory loans. The man with only $200 can with difficulty find a place where he can loan his savings on the best of all security, a good farm property. To meet the needs of the small investor many plans have been devised, some of which have been successful, and some are now being tested.

The introduction in Congress of a bill for the organization of a "national mortgage bank" was along this line. The proposed law was based on the German mortgage-bond methods, and had for its basis the issuing of debentures secured by real estate.

One form of modern mortgage handling is seen in the operations of a Pennsylvania firm that conducts a "mortgage bank." It is really a trust company, empowered by its charter to transact all kinds of trust-company business, but confining its energies to the making and selling of realty loans. In Minneapolis, there is another departure from the old method in a "gold-bond" system, which, it is hoped, will solve the problem of farm loan-making. It is based on the theory that the borrower should begin to make preparation for payment of his loan as soon as he secures the loan itself. Generally, urge the promoters, the farmer pays interest to the end of the five-year period for which he borrows money, and at the conclusion of that time his loan is as large as in the beginning. The new plan is for the borrower to make a ten-year note, and to pay instalments that each year include the interest and one-twentieth part of the principal, so that at the end of the ten-year period one-half the debt has been liquidated. The mortgages are deposited with a trust company, and serial gold bonds bearing 5 per cent., in denominations of $500 and $1,000, secured by the mortgages, to be paid through the trust company, are issued. The necessary red tape, the fact that the loan is for ten years, the demand for the repayment of part of the principal each year, and the possibility that the trust company might find itself burdened with a large load unless it found a ready market for its bonds are against the scheme. The farmer is conservative, and the simple, plain note, with the privilege of repayment of any part of the principal at any interest-payment date, is likely to be more satisfactory to him than any complicated bond plan. It will be interesting to see how the idea works out.

At Seattle, the center of a rapidly growing portion of the Pacific coast farming country, is found another plan. It is

not yet applied to the farm-loan field, but is devoted rather to city loans. Its basis is a part-ownership theory, on bonds issued for five years against large buildings. The earnings are apportioned up to 6 per cent., and above that two-thirds of the income goes to the bond owners, who are holders of securities in multiples of $100, based on the properties themselves. The interest is paid quarterly, on the coupon system. It is planned to make the bonds negotiable at any bank, and to give them many advantages that shall inure to their success as attractive investments.

In an interior town of eastern Nebraska is conducted a farm-mortgage plan on a somewhat similar basis. The farmer, making a loan of, say, $3,000, executes several notes, or bonds, of $500 each, aggregating the amount of the loan. These notes, or bonds, are secured by a mortgage running to a trustee for all the notes. The majority of holders of bonds on any given property has the right to direct action in the case of forced collection. The bonds bear 5 per cent. interest on the coupon plan, and are convertible into cash on sixty days' notice, making them negotiable at the local banks. Many strong points are included in this form of loan, and the promoters say that they have had little difficulty in placing the notes, or bonds, on the market. They claim that the plan meets the need of the small investor acceptably.

With all these new schemes for transforming the farm-loan business, none has superseded fully the old-fashioned straight mortgage; and, as the West increases in wealth and the older settlers have a larger loan fund for which they seek investment, the borrower finds it easier to get from his neighbor the accommodation he desires. This tendency lessens the amount of borrowing from Eastern capitalists, and, as a local understanding of the conditions is always advisable in the making of a loan, the individual investors in farm loans are becoming more and more the closely interested neighbors and near residents.

As the prosperity of the borrowing sections has increased, the interest rates have necessarily decreased. The mortgage department of an Eastern insurance company has the following table, showing the average return of mortgage loans in the States named:

States.	1880.	1885.	1890.	1895.	1900.	1905.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Colorado	7	6.78	6.50	6.25	6	6
Iowa	8	7.46	6.84	6	5.76	5.18
Michigan	6.98	6.51	6.10	5.73	5.68	5.10
Minnesota	7.99	7.68	6.52	6.05	6.02	6.01
North Dakota	8.18	7.68	7.43	6.57	6.25	6.10
Missouri	8.07	7.01	6.41	6.32	6.11	6.01
South Dakota	8.05	7.08	6.71	6.28	6.01	5.87
Oklahoma	8.43	8.01	7.50	6.25	6.09	6
Washington	7.68	7.10	6.72	6.50	6.18	5.75

The steadily decreasing rate, even in the farther Western States, is an index of the prosperity that has transformed the doubtful regions into substantial and permanently resourceful fields for the investor.

The reliability of the mortgage debtor, the actual value of the security, the accuracy of the abstract, and the collection of interest comprise a quartet of difficulties standing in the way of the timid investor in farm loans. They are, however, by no means insuperable, and their solution lies in the selection of a trustworthy agent. In many States the local banker occupies the position of real-estate loan broker, and obviously possesses many advantages for the position. In others, the real estate sales-agent also negotiates loans; if he can curb his exuberant estimate of land values, he is a capable one. Whoever he is, the loan broker must know land values, must understand something of land laws, and must be financially responsible—though in these days he does not "guarantee" the loans he places.

With the rapid fluctuation of stock quotations and the desire for substantial investments, the farm loan has increased in favor, and to-day is probably rated as high by the conservative investor as at any time in the nation's history.

Irrigation and Drainage Bonds.—A comparatively new class of bonds, which is just beginning to find favor among Eastern investors, comprises the irrigation and drainage bonds which are being quite extensively issued in the West.

This class of bonds had its origin, not very long ago, in connection with the economic development of the Western States. They grew out of the realization of the agricultural possibilities contained in both the low and in the arid lands, which had hitherto been found unprofitable to improve and cultivate.

Such bonds were naturally, at first, regarded with more or less suspicion; but the operation for which they are issued may now be said to have passed beyond the experimental stage, and irrigation and drainage bonds have now taken their place alongside municipals, which they resemble closely. A few of the characteristics of this class of securities may be pointed out.

The bonds are usually issued by what is known as irrigation or drainage "districts," varying in size from 10,000 to 70,000 and 80,000 acres—oftentimes larger. They not only have a direct lien on taxes, but are a first and paramount lien on all the land in the district. In this respect they do not, of course, differ from municipal bonds. The characteristic which has made these bonds attractive to Western investors in particular, who have bought very freely of them for some time past, is the yield. Five per cent. is the lowest rate at which they are issued, and in most cases they are a 6 per cent. bond, which can be bought to yield from 5 per cent. to 5¾ per cent.

Among the important considerations for the investor whose attention has been attracted to irrigation and drainage bonds the following may be mentioned:

(1) Character of the farming population of the district.

(2) Fertility of the soil and character of products which may be raised.

(3) Location of markets.

(4) Transportation facilities.

(5) General physical conditions.

Besides these there are, of course, the considerations of valuation, tax burden, etc., which obtain in the case of municipal bonds.

Another class of bonds similar to these which have just been "discussed" are known as "levee" bonds. They are issued for the same purpose as the others—the reclaiming of waste lands for agricultural purposes—and the same considerations may be said to apply to them. They are issued principally in the Southern States.

Since the Eastern investor has very largely come around to the way of thinking of his Western neighbor—namely, that there can be good bonds with a high yield—there has been a growing inquiry in regard to the above classes of securities, and it is likely that they will continue to grow in favor.

PART V

Industrial and Public Service Bonds

Industrial Bonds as Investments.—The issuance of bonds by industrial companies is fairly common, and as time progresses it is likely to become more so. There are one or two principles in connection with industrial bonds that may profitably be laid down as worthy of general acceptance, says *The Wall Street Journal*.

The first is that, on the whole, it is not desirable for an industrial company to issue bonds. When a company has a business that is thoroughly standardized in all particulars, and that is stable in character, and when it has a considerable quantity of property of established value quite apart from its value as a going concern, it may be wise for it to borrow a moderate amount of money for working capital at a low rate of interest on security of some kind, being a first lien more or less general on assets. The excuse for doing so, however, depends upon the stability of profits and values.

In the case of railroads, the conditions necessary to make bond issues a satisfactory form of finance are present. Permanent values can nowadays be ascertained with reasonable closeness, and bond issues can consequently be so planned as to involve but little risk to the owners. This is very far from being the case with an industrial company, as a general rule.

The conditions under which industrial companies operate are frequently such as to involve enormous fluctuations in profits and values from year to year. Moreover, the case of integrated companies differs very materially from that of non-integrated companies, so that in considering an industrial bond, every instance must be regarded entirely by itself and on its own merits. The one thing, however, that is certain is that, failing extraordinary conditions, an industrial company ought not to issue bonds to any large extent. It should always be remembered that issuing a bond means borrowing money at a low rate of interest by giving large security, and the giving of large security means the placing in peril of stockholders' property, if profits fall off.

Thus, the policy of the Steel Company, in replacing $200,000,000 of preferred stock with an equal quantity of bonds, could only be justified by such an extraordinary stability of profits as would make the risk to stockholders no greater than would fairly be represented by a 2 per cent. per anunm on $200,000,000. It is because such conditions were possibly not

present that the bond proposition of the Steel Company was disapproved by some authorities.

The second point that is worth noting about industrial bonds is that it is difficult, by reason of uncertainty of values, to give them mortgage rights that will always fully protect the bondholders. The consolidation of a number of enterprises means the dismantling and abandonment of a good many of the industrial plants and properties, as manufacture is concentrated at the most suitable points. Thus, where there are a number of underlying bonds, it may readily happen that the property directly securing one or more of these issues is transformed from a going concern into what is merely some real estate and a heap of "junk," worth anything from 5 to 20 per cent. of what it originally was worth as a going concern. This is obviously true of underlying or individual mortgages, and it may always become true of mortgages on existing plant. New plants may be built at which the process of manufacture will be concentrated, and the old ones will be rendered largely valueless.

Under any circumstances it is clear that an industrial bond should be represented at least by working capital. In other words, an industrial company which has outstanding any fixed obligation ought to have always net current assets sufficient to pay off the bond. If it has not, it means that the bond represents permanent or fixed investment, which, as a principle, is unsound in the case of industrial companies.

Industrial bonds are not a favorite with investors up to this time. Some, of course, sell at good prices; but these are only the cases where the company has a net working capital large enough to take up all the bonds if the concern were liquidated. The general impression is that in many of the other cases experience may prove, in the long run, that the bonds are not good investment.

Industrial Bonds, Peculiar Characteristic of.—In regard to the bonding of industrials when a depression overtakes us, E. K. Somerville, a well-known corporation lawyer, says:

"Bonds issued by any of the new industrials should be scrutinized with fully as much care as any other investments. Regard must be given to the character of the corporation, the laws of the State under which it is organized, and the laws of the various States where the property is located. Many of the larger industrials own property in a dozen or more States, and seek to cover it all by a blanket mortgage to secure their bonds. In such cases the points of possible weakness are almost numberless, and the investor may well require the fullest assurance as to the validity of the securities offered.

"Corporate bonds are merely obligations secured by a mortgage upon the property of the company, and they are necessarily hedged with so many conditions as to be very different, indeed, from the ordinary bond and mortgage upon an individual parcel of real estate. Industrial bonds, for example, run for a long term of years, and must provide for the proper handling meanwhile of all the complex interests of great manufacturing enterprises. They must take into account the immense loss which would result from too sudden change of ownership of control, and must protect, at once the bondholders from the neglect or improvidence of the company, and the company from an untimely seizure of its plants from the trustee. They must provide against default in interest, the failure to insure, the accumulation of taxes or other charges, the decay of the working plants and equipment, and the depletion of the general assets conveyed in trust. On the other hand, the company must be left free to control its property and manage its affairs without interruption until some substantial default occurs. The provisions governing these details must necessarily vary in each case, and the common sense, experience, and skill of the draughtsman are alike called into play in framing them.

"But back of all these incidents are the larger questions of the right to acquire and mortgage real estate, and the regularity of the proceedings under which the bonds are created. Corporations are artificial entities created by law, and in some States their right to hold real estate is strictly limited to a certain fixed maximum, or to such real estate as may be actually necessary for their charter purposes. In a notable recent case the plans of a great corporation have been entirely recast, as the result of a court decision on this important point. Then, the charter of the corporation itself must be carefully drawn and complied with, and all the steps necessary to evidence the assent of the corporation to the conveyance must be taken with such formality and so recorded as to afford, at any time, indubitable evidence of the intention of the parties."

Narrowness of Industrial Bond Market.—Outside of half a dozen great issues the industrial bond market is very narrow. To illustrate, the following list embraces all the strictly industrial bonds that were traded in on the New York Stock Exchange in 1904 to the amount of $1,000,000 or more:

Bond.	*Amount.*	*High.*	*Low.*
Consolidated Gas conv. 6's	*$5,733,500	192¾	171¾
N. Y. Gas, E. L. H. & P. 5's	1,791,000	113¾	105½
" coll. 4's	2,224,000	96½	90
Am. Hide & Leather 6's	1,000,000	96¼	70
Am. Tobacco new 6's	*16,101,000	112⅜	106

* On the market less than one year.

Bond.	*Amount.*	*High.*	*Low.*
Am. Tobacco 4's	*35,790,000	76	63⅜
Consol. Tobacco 4's	80,233,000	85¾	53¾
Distillers' Securities 5's	11,917,000	80	61½
Lackawanna Steel 5's	1,586,000	106	92⅜
Standard Rope & Tw. inc	1,499,000	9	1½
U. S. Realty 5's	4,002,000	97¼	80
U. S. Steel 5's	179,575,500	95⅞	68¾
Colorad Fuel & Iron cts	*6,463,000	88	69½
Western Union 4½'s	1,502,000	106½	101½

* On the market less than one year.

"Investments," in the proper sense of the term, are few and far between in this list. The bonds of the New York Gas, Electric Light, Heat & Power Company are good, because the company is far beyond the experimental stage. The Western Union 4½'s are also good; but Western Union is hardly an "industrial," as the term is usually applied.

A glance at the list, which represents active industrial bonds very fairly, shows the following facts:

American Tobacco new bonds are active because the capitalization has been readjusted, which readjustment was the cause of some bitterness to old security holders.

Distillers' Securities bonds are also a product of reorganization on a somewhat drastic basis.

Standard Rope & Twine is now in the hands of a receiver.

United States Realty was lately reorganized after a shake-up that was remarkable enough to need slight comment.

Colorado Fuel & Iron has also had a very checkered career since its stock sold at 110 two years ago.

United States Steel is just reviving from eighteen months of deep anxiety on the part of its security holders. This also is too well-known to need comment.

These are a few of the reasons why industrial bonds, as a class, are not the object of much comment in these columns. They are too speculative. There is too much reorganization mixed up with them. They only seem to become active when people want to get out of them. There is no good broad trading market in the good industrial bonds as there is in the good railroad bonds.

The range of prices in 1904 should be sufficient comment upon the stability of industrial bonds in a crisis.

The true inwardness of the industrial bond market is perhaps brought to light in the statement that the real values in this market are too closely held to exercise any great influence. The big interests in the industrials own the good bonds. The companies sell general liens, junior bonds, stocks and debentures to the public when the public will take them. Bonds like the General Electric 3½ per cent. debentures do not come into

the market. Only ninety-two of them were sold in 1904, on a range of three points. The underlying bonds of companies like People's Gas are excellent, but the public does not refer to bonds of this class when it speaks of "industrials." Recently the General Electric Company deposited a lot of underlying electric companies bonds in trust and sold against them collateral trust bonds. These latter are good of their class; but the real security is in the underlying bonds, and General Electric wants these for itself.

Street Railway Bonds.—The stability of such bonds is largely dependent upon density of traffic, and bankers usually advise purchases of bonds secured by well-managed properties in large cities. Depreciation charges of from 5 to 10 per cent. of gross earnings should be recorded against income prior to fixed charges. The market for street railway bonds is largely local. In 1903 the debt of the street railways of the United States exceeded $1,000,000,000. The relatively low price of street railway bonds is partially due to the fact that electric railways are young and the companies barely beyond the experiment stage. A well-built electric railway should be operated and maintained at 45 per cent. of gross. As a class street railway bonds are speculative. The investor before buying should consult a banker or broker having a spotless record. There are certain objections to bonds of this class, including the following: (1) security of the franchise; (2) possibility of political graft and hostile legislation; (3) growth of socialistic tendencies; (4) extent of milking to supply promoters' and politicians' graft; (5) character of management and its relationship to watered stock; (6) if a monopoly, when the fact is exploited to raise money, the company arouses public opposition.

Telephone Bonds.—The telephone is a natural monopoly. Competition is not desirable in most cases. for two or more telephone systems in a single city do not increase the public convenience. One company is better than two, which is also the case as regards other municipal public service properties, notably light and traction companies. A monopoly is not popular in this country, and the tendency of public opinion is to municipal ownership or strict public regulation and publicity of monopolies operating public utilities.

According to the Census Bureau report on telephones and telegraphs for the year 1902, the total amount of bonds of telephone companies doing business in this country outstanding in that year was $73,981,361. Up to that date, while the total volume of securities outstanding as representing an interest in

telephone companies of the country amounted to a par value of $348,031,059, the bonded indebtedness amounted to only 21 per cent. of this aggregate.

One reason for the general low bonded indebtedness of telephone companies on that date was that it had been the policy in the early financing of the Bell companies to issue stock rather than bonds wherever possible, and this policy had been consistently followed, with the result that several of the large Bell companies had no bonded debt, or very little, and the same is true of many of these companies to-day. Out of the total, the Bell companies had outstanding, in 1902, $306,627,501 capital stock and $65,673,272 bonds.

Since 1902 telephone development has been very rapid, and one of the most remarkable changes in the situation has been the modification in the character of the securities held by the public. Only three years have elapsed since the data for the report referred to was compiled, but basing the estimate on the issues of only the principal telephone companies of the country it is probably safe to say that the bonds of such companies now outstanding aggregate in the neighborhood of $150,000,000. In other words, the supply of these bonds has doubled in three years, and 1902 stood at the end of a decade whose closing years saw an active telephone development.

This change appears to be largely due to the advent of the independent forces into the telephone field. While the American Telephone & Telegraph Company and its subsidiaries have increased bonded indebtedness to some extent, this has not, as a general rule, been done by them as fast as by the independents. Just what effect this policy will have on the development of the independent companies only time can disclose; but it appears as if their rivals have a larger reserve financial power upon which to draw to meet future requirements.

If they prove a safe and profitable investment, as undoubtedly they can if the companies are conducted upon sound business principles, the great increase in the volume of telephone securities should tend to greatly increase their popularity and broaden their market. The force of this point is more readily understood when it is considered that the railroad bonds outstanding in 1903 amounted to $6,722,216,517. Naturally enough these latter can be more generally distributed, and are hence better known. The investors are familiar with such securities as a general class, and are willing to examine into particular merits, whereas in the case of a security which is not familiar as to general characteristics the investor is often unwilling to go beyond generalities.

In the case of telephone bonds, the important matter to be

considered is in the item of maintenance. The questions of prime importance which must be answered satisfactorily are: Was the plant originally new and up-to-date? Has it been maintained on a liberal basis? It must be up-to-date in the first instance or it will not be in a position to meet properly invasion of its territory by others. Besides, past experience has shown that new discoveries in telephony rapidly impair the value of comparatively new apparatus.

Then, of course, the property must be maintained at a high state of efficiency. To do this enough must be spent not only to keep existing plant properly repaired, but enough also to replace it, and that, too, at a date possibly before it is actually worn out. In the past it has been found that some of the apparatus had to be replaced in ten years or less, often not because it was worn out, but rather because it was antiquated. It is possible that the next decade may not see as rapid developments in the field of telephony as the last, in which case the cost of necessary replacement at short periods will possibly be reduced. Still each year a halt has been awaited, and each year unheeding has brought forth its invention of higher efficiency and simultaneously condemned thousands of dollars of apparatus to the scrap pile. In the face of these conditions the investor should always be particularly critical regarding this matter of maintenance. It will be found that in the great majority of cases if the item is properly provided for the telephone bond is good.

The question of rates charged by the company is important in so far as one can judge roughly, given a certain population, the number of telephones in use, and the rates charged, whether the rates are sufficient for efficient operation and maintenance of the given plant.

It is taken for granted that the bonds considered cover actual cost or less, and the value of the plant as a going concern has been neglected here for that reason. There are other points of interest to the telephone bondholder—such, for instance, as the actual participation of real estate and buildings in the "unearned increment" of surrounding property—but for general purposes the more important points have been outlined above.

As in every investment field, there are all grades of telephone bonds ranging from those that sell on a 4.10 per cent. basis, such as American Telephone & Telegraph 5 per cent. notes, down to bonds of the lowest grade. In the middle ground there are bonds with various rights to consideration, and doubtless as the volume of such bonds grows and as the industry is better understood by the public telephone securities will become increasingly popular.

PART VI

Savings-Banks and Bonds

New York Savings-Bank Earnings.—William H. S. Wood, president of the Bowery Savings-Bank, pointed out in 1906 that the legal restrictions surrounding sav·ngs-bank investments in the State of New York are extremely rigid. But three classes are permitted—namely, real estate mortgages upon property within the State only, bonds of various governmental corporations, and first-class railroad bonds. While in many of the States investments in national, State, county, municipal, and school bonds are subjected to reasonable restrictions, the State of New York imposes a much more severe test in the case of municipal corporation bonds than is imposed by any other State. Several of the New England States forbid investments in municipal bonds except within certain specified States. In the case of New York, no municipal bonds may be purchased except those issued by cities having a population of at least forty-five thousand persons, having been incorporated twenty-five years previous to the issuance of the bonds, and having never defaulted in the payment of any principal or interest for a longer period than ninety days. In addition to this, the total debt limit of such municipalities must not exceed 7 per cent. of the total valuation at the last previous assessment, and the cities whose bonds New York savings-banks may purchase must be located in States which, since January 1, 1861, bave not repudiated or defaulted upon any part of the principal or the interest of any debt authorized by the Legislature of any such State. These restrictions debar the savings-banks of New York from investing in a very wide range of profitable and often reasonably safe securities issued by small municipalities, which are available for investment to savings-banks of other States.

In sharp contrast to these restrictions is the case of the State of Pennsylvania, whose savings-banks are sometimes cited to illustrate the large earning powers of savings-bank investments, as an argument for subjecting them to taxation. The laws of Pennsylvania authorize savings-banks to invest in the bonds of any city, county, town, or village in the United States, with absolutely no restriction of any kind, either as to debt limit or repudiation. In general, the provisions of the various States as to investment in railroad bonds are fairly well restricted; but New York leads them all in the limitations placed about investments of this kind, solely in the interest of safety. Its requirements exclude all railroad bonds of questionable or uncertain

value, and restrict investments to the gilt-edged securities of such railroads as have ample property, and have demonstrated their wise management and continued earning power, both as to interest and dividends, during a considerable period.

No other State has such severe restrictions in this particular, and but two or three even approach New York as relates to railroad investments. A few of the States permit investments in securities of street railways; this class is debarred in New York. Massachusetts is one of the few States which approves street-railway securities, and in this particular Massachusetts (so often mistakenly quoted as in the same class with New York) savings-banks possess a great advantage in earning power over those of New York State. Connecticut permits investments in the bonds of specified street railway companies. Maine opens the door widely for investments of this class by permitting them in the case of street railways in numerous specified States, the sole condition being that the cash payments of capital stock expended upon property shall at least equal one-third of the amount of the outstanding bonds.

From all of the foregoing it may readily be seen that the State of New York occupies a peculiar position as regards its savings-bank investments, strictly limited by law to various forms of governmental securities, to specified railroad bonds, and to real estate mortgages within the State; whereas the banks of other States have open to them the very profitable channel of commercial loans at the highest rate of interest, and investments in securities which offer a high and, commercially speaking, frequently a safe rate of interest. The restrictive laws in New York have naturally resulted in a great competition for the class of corporate securities in which New York savings-banks are permitted to invest. It is in the gilt-edged bond issues that the great capitalists of the country place their immense accumulations, and the demand for this class of securities is always very great on the part of investors, with whom safety is more considered than large profits; and consequently such securities always command a very considerable premium, whereby the net interest is usually reduced to less than 4 per cent., and often as low as 3 per cent., and even under.

In other States the low earnings derived from gilt-edged securities are compensated for by the additional and much larger income derived from loans and miscellaneous investments. The average earning power, therefore, of savings-funds in other States is considerably larger than in the State of New York, simply because savings-banks in other States are conducted as profit-eating enterprises, usually for the benefit of stockholders (most of the savings-banks of other States being stock

companies). It would appear to have been the legislative policy to tax such business enterprises precisely as any other profit-earning business is taxed. In the State of New York, on the contrary, security has always been held to be more important than profit.

Public policy has not regarded the accumulations or surplus of savings-banks other than as a wise provision for the security and general welfare of the depositors, and for that reason, until recently, no part of the savings of the poor has been subjected to the tax which other States impose upon these institutions. Under present conditions, the law prevents large earnings in the interest of safety, and for the benefit of their hard-working, industrious classes the State should repeal any tax upon the earnings of savings-banks, which have been so depressed and lessened to a minimum by its own rigid restrictions.

New York Savings-Banks and Insurance Companies, Administration of.—The savings-banks of New York hold $1,200,000,000 of deposits, which happens to be almost exactly the amount of the people's money held by the three big life insurance companies. But you hear no stories about them of graft, extravagance or reckless investments. Last year their total expenses of all sorts, including taxes, were only 50 per cent. larger than the home-office salaries alone of the three great insurance companies. The number of depositors on January 1 last was 2,443,555, against 2,148,850 policy-holders in the three life-insurance giants on the same date. Total expenses of all sorts, including taxes, were, last year, $3.39 for each $1,000 of assets, or practically one-third of 1 per cent. The Equitable Life's expenses, including all bonuses and commissions to agents, were nearly fifteen dollars for each $1,000 of assets, or 1½ per cent. Excluding all cost of agency maintenance and of the medical department, the expenses were still about ten dollars for each 1,000 of assets.

I do not mean that the two businesses are actually comparable, for, of course, they are not. But the expense ratios are interesting in view of the fact that the Equitable last year earned in interest and dividends only 3.95 per cent. gross on its assets, from which expenses must be deducted; while in the same year eleven New York savings-banks were able to advance the net interest paid depositors from 3½ to 4 per cent., earning expenses and something for surplus over and above that.

The Bank for Savings, incorporated in 1819, has $75,000,000 deposits, on which it paid 3¾ and 4 per cent. last year, and its total salaries were $90,765. The Bowery Savings-Bank, incorporated in 1834, has $90,000,000 of deposits, and paid in salaries

$93,072. These are simply typical cases, taken offhand. The Seaman's Bank, with $64,000,000 of deposits; the Emigrant Industrial Bank, with $75,000,000; the German Bank, with $60,000,000, and so on, show substantially the same thing. You never read of the president of those concerns in underwritings and promotions. Although they handle immense amounts of the public's money, Wall Street knows them not. A glance at the consolidated statement of the savings-banks will suggest why.

The statement shows total assets of $1,300,000,000, of which $570,000,000 is invested in first mortgages on real estate, $15,000,000 in United States Government bonds, and $410,000,000 in other public bonds—that is, issues of States, counties, cities, towns, and school districts. There is $197,000 000 in real mortgage bonds issued by strong railroads, but not including any of those new so-called bonds that are secured simply by the deposit of stocks as collateral. The street must seek a market elsewhere for those highly popular and highly financial securities. Then there is $800,000—or about two-thirds of 1 per cent.—in loans on pledges of securities. The rest is in real estate occupied by the banks and in cash in hand and on deposit and in interest accrued but not due.

Savings-Bank Investment Laws.—

STATE OF CONNECTICUT.

Savings-banks may invest their deposits and surplus as follows:

GOVERNMENT BONDS.

In the bonds of the United States, the District of Columbia.

STATE AND MUNICIPAL BONDS.

In the bonds of any of the New England States, or any of the States of New York, New Jersey, Pennsylvania, Delaware, Maryland, Ohio, Kentucky, Michigan, Indiana, Illinois, Iowa, Wisconsin, Minnesota, Missouri, Nebraska, Kansas, California, Colorado, and Oregon; in the bonds of any city in the New England States, or in the State of New York; of Newark, Paterson, and Trenton, in the State of New Jersey; of Philadelphia, in the State of Pennsylvania; of Cincinnati, Cleveland, Columbus, Dayton, and Toledo, in the State of Ohio; of Louisville, in the State of Michigan; of Chicago, in the State of Illinois; of Milwaukee, in the State of Wisconsin; of St. Louis, in the State of Missouri; or of Omaha, in the State of Nebraska; in the obligations of any of the counties, towns, cities, boroughs, and school districts in this State; in the capital stock of any bank or trust company located in this State, or in the city of New York, in the State of New York; or in Boston, in the State of Massachusetts; in the bonds of any other incorporated city located in any of the States mentioned in this section having not l ss than twenty thousand inhabitants, as ascertained by the United States or S ate census, or any municipal census taken by authority of the State, nex' preceding such investment; provided, the amount of the bonds of such city, including the issue in which such investment is made, and

its proportion, based on the valuation contained in the assessment for taxation next preceding such investment, of the county and town debt, after deducting the amount of its water debt and the negotiable securities in the sinking funds which are available for payment of its bonds, does not exceed seven per centum of the valuation of property in such city as assessed for taxation next preceding such investment; and provided further, that the State or city issuing such bonds has not defaulted payment of any of its funded indebtedness or interest thereon within fifteen years next preceding the purchase of such bonds by the savings-bank; but this section shall not be held to authorize the investment of any funds in any "special assessment bonds" or "improvement bonds" so-called, which are not direct and primary obligations of the city issuing the same.

RAILROAD BONDS.

In the bonds of any railroad company organized under the laws of any of the States mentioned in this section, and which bonds are secured by a first mortgage as the only mortgage security given by such railroad company upon some portion of the railroad owned by it, or given by a railroad company a majority of the capital stock in which is owned by the railroad company issuing such bonds, upon some portion of the railroad owned by it, but leased or operated by the railroad company issuing such bonds, and which portion of such railroad in either case shall be located wholly or in part in one or more of the States mentioned in this section, provided the entire railroad of such company is located wholly within the United States; in the consolidated bonds of any railroad company incorporated by this State and authorized to issue such bonds to retire the entire funded debt of such company; provided, that in every case such company shall have paid each year, for a period of not less than five years next previous to such investment, in addition to the interest on its funded indebtedness, dividends of not less than four per centum per annum upon its entire capital stock outstanding; and provided further, that said outstanding capital stock at the time of such investment equals or exceeds in amount one-third of the entire outstanding issue of such bonds.

In the bonds of the following named railroad companies, viz.: Boston and Albany railroad company, Boston and Lowell railroad company, Boston and Maine railroad company, Concord and Montreal railroad company, Fitchburg railroad company, Harlem River and Portchester railroad company, Maine Central railroad company, New England railroad company, New York and New England railroad company, New York, New Haven and Hartford railroad company, and Old Colony railroad company; also the following securities: Central railroad company of New Jersey, general mortgage five per centum gold bonds, due July 1, 1987; Burlington, Cedar Rapids, and Northern railway company system, Cedar Rapids, Iowa Falls, and Northwestern railway consolidated first mortgage five per centum bonds, due October 1, 1921, and Burlington, Cedar Rapids, and Northern railway company consolidated first mortgage and collateral trust five per centum bonds, due April 1, 1934; Great Northern railway company system, St. Paul, Minneapolis, and Manitoba railroad company, Montana Extension, four per centum bonds, due June 1, 1937, Pacific Extension mortgage four per centum bonds, due July 1, 1940; Montana Central railway company first mortgage five per centum and six per centum bonds, due July 1, 1937, and Wilmar and Sioux Falls railway company first mortgage five per centum bonds, due June 1, 1938; Illinois Central railroad company system, Chicago, St. Louis, and New Orleans railroad company consolidated mortgage five per centum and three and one-half per centum bonds, due June 15, 1951; Chicago and Northwestern railway company system, Chicago, St. Paul, Minneapolis, and Omaha railway company consolidated mortgage six per centum bonds, due June 1, 1930, and in the mortgage bonds heretofore issued, which said consolidated mortgage six per centum bonds are to retire at maturity; Chicago and Eastern Illinois railroad company, general consolidated and first mortgage five per centum bonds, due November 1, 1937, and in the mortgage bonds heretofore issued, which said general consolidated and first mortgage five per centum bonds are to retire at maturity; Minneapolis

and St. Louis railroad company first and refunding mortgage four per centum bonds, due March 1, 1949, and in the mortgage bonds heretofore issued, which said first and refunding bonds are to retire at maturity; Milwaukee and Northern railroad company consolidated mortgage six per centum bonds, due June 1, 1913, and in the mortgage bonds heretofore issued, which said consolidated six per centum bonds are to retire at maturity; Atlantic Coast Line railroad company first consolidated mortgage four per centum gold bonds, due July 1, 1952, and in the mortgage bonds heretofore issued, which said first consolidated mortgage bonds are to retire at maturity; Terminal railroad association of St. Louis general mortgage refunding four per centum sinking fund gold bonds of 1953, and in the mortgage bonds heretofore issued, which said general mortgage bonds are to retire at maturity; St. Louis, Iron Mountain and Southern railroad company, river and gulf division, first mortgage four per centum bonds, due May 1, 1933; Buffalo and Susquehanna railway company, first mortgage four per centum gold bonds, due in 1951; any general or consolidated mortgage bonds issued by any of the following named railroad companies to retire all of the outstanding prior mortgage bonds secured upon the property covered by such general or consolidated mortgage; Chicago and Northwestern railway company, Chicago, Burlington and Quincy railroad company, Chicago, Milwaukee and St. Paul railway company, Chicago, Rock Island and Pacific railway company, Chicago and Alton railroad company, Cleveland and Pittsburg railroad company, Lake Shore and Michigan Southern railroad company, Michigan Central railroad company, Morris and Essex railroad company, New York Central and Hudson River railroad company, Pennsylvania railroad company, St. Paul, Minneapolis and Manitoba railway company, Eastern railway company ot Minnesota, northern division, and in the mortgage bonds hitherto issued which such consolidated or general mortgage bonds are to retire at maturity; Louisville and Nashville railroad company, and in the mortgage bonds hitherto issued which such consolidated or general mortgage bonds are to retire at maturity; provided, that at no time within five years next preceding the date of such investment in such general or consolidated mortgage bonds issued by any of the railroad corporations last named shall such railroad corporation have failed to pay regularly and punctually the principal, at maturity or as extended, and interest on all its mortgage indebtedness, and, in addition thereto, dividends upon all its outstanding capital stock during the preceding five years; and provided further, that at the date of every such dividend the outstanding capital stock of such railroad corporation shall have been equal to at least one-third of the total mortgage indebtedness of such railroad corporation, including all bonds issued or to be issued under any mortgage securing any bonds in which such investment shall be made. No bond of any railroad corporation named in this section shall be a legal investment for a savings-bank when such corporation, or the system of which it is a part, shall fail to pay dividends on all of its capital stock; and this section shall not be held to authorize any investment in the bonds of any corporation operating its railroad exclusively by any means other than steam as a motive power, or in the bonds of any street railway company.

And also in the first mortgage bonds of the Hartford Street railway company, and the Fair Haven and Westville railroad company, and in all bonds of the Consolidated company, and the Connecticut railway and lighting company. In the first mortgage gold four per cent. bonds of the Southern Indiana railway company, due 1951.

Laws of 1905.

STATE OF INDIANA.

It shall be lawful for the trustees of any savings-bank to invest the money deposited therein only as follows:

GOVERNMENT BONDS.

In the stocks or bonds or Treasury notes of the United States.

STATE AND MUNICIPAL BONDS.

In the stocks or bonds of this State; in the orders or bonds of any county, city, or town in this State issued pursuant to the authority of law in the stocks or bonds of any State in the Union that has, for five years previous to such investment being made, regularly paid the interest on its legal bonded debt in lawful money of the United States.
(Revised Statutes, 1897, Section 3010.)

STATE OF IOWA.

Each savings-bank shall invest its funds or capital, all moneys deposited therein, and all its gains and profits, only as follows:

GOVERNMENT BONDS.

In bonds or interest-bearing notes or certificates of the United States.

STATE AND MUNICIPAL BONDS.

In bonds or evidences of debt of this State, bearing interest.
In bonds or warrants of any city, town, county, or school district of this State, issued pursuant to the authority of law; but not exceeding twenty-five per cent. of the assets of the bank shall consist of such bonds or warrants. * * *
(Section 1850, Revised Statutes.

STATE OF MAINE.

Savings-banks and institutions for savings may invest in:

GOVERNMENT BONDS.

In the public funds of the United States and District of Columbia.

STATE AND MUNICIPAL BONDS.

In the public funds of any of the New England States, and of the States of New York, Pennsylvania, Maryland, Ohio, Indiana, Kentucky, Michigan, Wisconsin, Minnesota, Iowa, Illinois, Missouri, Kansas and Nebraska.
In the bonds of the counties, cities, and towns of any of the New England States.
In the bonds of cities and districts in the States of New York, Pennsylvania, Maryland, Ohio, Indiana, Kentucky, Michigan, Wisconsin, Minnesota. Iowa, Illinois, Missouri, Kansas and Nebraska, having a population of seventy-five thousand or more, when issued for municipal purposes, and which are a direct obligation on all the taxable property therein.
In the bonds of counties of twenty thousand inhabitants or more in the States of New York, Pennsylvania, Maryland, Ohio, Indiana, Kentucky, Michigan, Wisconsin, Minnesota, Iowa, Illinois, Missouri, Kansas, and Nebraska, when issued for municipal purposes, and which are a direct obligation on all the taxable property therein. except when issued in aid of railroads, provided that the net municipal indebtedness of such county does not exceed five per cent. of the last preceding valuation of the property therein for the assessment of taxes.
In the bonds of any city of ten thousand inhabitants or more in the States of New York, Pennsylvania, Maryland, Ohio, Indiana, Kentucky, Michigan, Wisconsin, Minnesota, Iowa, Illinois. Missouri, Kansas and Nebraska, when issued for municipal purposes, and which are a direct obligation on all the taxable property therein. except when issued in aid of railroads, provided the net municipal indebtedness of said city does not exceed five per cent. of the last preceding valuation of the property therein for the asesssment of taxes.

In the refunding bonds of counties and cities above enumerated, issued to take up at maturity bonds which were legal and constitutional when issued, provided the interest has been fully paid on such original bonds for at least five years prior last to such refunding; provided further that such counties and cities can otherwise meet the foregoing conditions.

In the bonds and obligations of school district boards boards of education, and other corporate bodies within such cities, authorized to issue bonds payable primarily from taxes levied on all the taxable property in said district; provided that the population of the district is ten thousand or more, and the population and assessed valuation of the district are equal to at least ninety per cent. of the population and the assessed valuation of the city within which such district is located; provided further that the net municipal indebtedness of such district does not exceed five per cent. of the last preceding valuation of the property therein for the assessment of taxes.

In the bonds or obligations of any municipal or quasi municipal corporation of this State, when such securities are a direct obligation on all the taxable property of said corporation.

RAILROAD BONDS.

In the first mortgage bonds of any completed railroads of the States of New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Maryland, Ohio, Indiana, Kentucky, Michigan, Wisconsin, Minnesota, Iowa, Illinois, Missouri, Kansas, and Nebraska.

In the first mortgage bonds of the Central Pacific, Union Pacific, and Northern Pacific railroads.

In the mortgage bonds of any railroads leased to any dividend paying railroad in New England upon terms guaranteeing the payment of a regular stated dividend upon the stock of such leased road and the interest on its bonds.

Street railroad companies are not railroad companies within the meaning of the foregoing clause of this section.

In the bonds of street railroads constructed in this State prior to April twenty-seventh, eighteen hundred and ninety-five, and in the bonds of street railroads in this State constructed after said date and in the first mortgage bonds of any completed street railroad in the States of New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Maryland, Ohio, Indiana, Kentucky, Michigan, Wisconsin, Minnesota, Iowa, Illinois, Missouri, Kansas, and Nebraska, provided that in the case of street railroads constructed in this State after April twenty-seventh, eighteen hundred and ninety-five, and in the case of street railroads in the States above named, an amount of capital stock equal to thirty-three and one-third per cent. of the mortgage debt shall have been paid in, in cash, and expended upon the road, evidenced by a certificate of the railroad commissioners of the State where the road is located, filed in the office of the Secretary of State, of this State, that said percentage has been so paid in and expended in addition to the amount of the bonded debt; provided, that any such of the above States as have no railroad commissioners having supervision of street railroads the bank examiner of this State may ascertain the facts, and if they meet the foregoing requirements, may file certificate thereof with the Secretary of State, and all the expenses and compensation of the bank examiner for such service shall be paid by the railroad company seeking to make its bonds a legal investment under this section, whether the same are admitted or not.

In the mortgage bonds of any water company in the New England States actually engaged in supplying any city or cities, town or towns, village or villages, or other municipal corporations with water for domestic use and for the extinguishment of fires, whenever such company is earning more than its fixed charges and interest on its debts and its running expenses.

In the bonds of any corporation other than railroads and water companies, incorporated under the authority of this State, and actually conducting in this State the business for which such corporation was created, which are earning and paying a regular dividend of not less than five per cent. a year.

In the stock of any railroad company of this State unencumbered by mortgage.

In the stock of any dividend paying railroad in New England.

In the stock of any railroad leased to any dividend paying railroad in New England upon terms guaranteeing the payment of a regular stated dividend upon the stock of such leased road and the interest on its bonds.

In the stock of any corporation, other than railroad and water companies, incorporated under authority of this State, and actually conducting in this State the business for which such corporation was created, which earns and is paying a regular dividend of not less than five per cent. a year.

The term "net municipal indebtedness of counties" as used in this section shall be construed to include all bonds which are a direct obligation of the county, less the amount of any sinking fund available in reduction of such debt.

The term "net municipal indebtedness of cities and districts" as used in this section shall be construed to include in the case of either, not only all bonds which are a direct obligation of the cities, but also all bonds of the districts or boards within the same as above enumerated, exclusive of any such debt created for a water supply and of the amount of any sinking fund available in the reduction of such debt.

The number of inhabitants of cities and counties shall be determined by the last previous official census thereof as established by the last United States or State census, or city or county census taken in the same manner as United States or State census, and duly certified to by the clerk or treasurer of such city or the auditor or treasurer of such county.

All investments shall be charged and entered on the books of the bank at their cost to the bank, or at par when a premium is paid.

(Chapter 190, Laws of 1903.)
(Chapter 103, Laws of 1905.)

STATE OF MASSACHUSETTS.

Deposits and the income derived therefrom shall be invested only as follows:

GOVERNMENT BONDS.

* * * In the public funds of the United States and of the District of Columbia.

STATE AND MUNICIPAL BONDS.

In the public funds of any of the New England States or of the State of New York. In the legally authorized bonds of the States of Pennsylvania, Ohio, Michigan, Indiana, Illinois, Missouri, Minnesota, Wisconsin, and Iowa.

In the bonds or notes of any county, city, or town of this commonwealth.

In the bonds or notes of any incorporated district in this commonwealth whose net indebtedness does not exceed five per cent. of the last preceding valuation of the property therein for the assessment of taxes.

In the bonds or notes of any city of Maine, New Hampshire, Vermont, Rhode Island, or Connecticut, whose net indebtedness does not exceed five per cent. of the last preceding valuation of the property therein for the assessment of taxes; or of any county or town of said States whose net indebtedness does not exceed three per cent. of such valuation, or of any incorporated water district of said States whose bonds or notes are a direct obligation on all taxable property of such district, and whose net indebtedness does not exceed three per cent. of such valuation.

In the legally authorized bonds for municipal purposes, and refunding bonds issued to take up at maturity bonds which have been issued for other than municipal purposes, but on which the interest has been fully paid, of any city of the aforesaid States and of the State of New York, which has at the date of such investment more than thirty thousand inhabitants, as established by the last national or State census, or city census certified to by the city clerk

or treasurer of said city and taken in the same manner as a national or State census, preceding such investment, and whose net indebtedness does not exceed five per cent. of the valuation of the taxable property therein, to be ascertained by the last preceding valuation of property therein for the assessment of taxes.

The term "net indebtedness" in this statute shall be construed to denote the indebtedness of any city, town, or district, omitting debt created for supplying the inhabitants with water, and deducting the amount of sinking funds available for the payment of such indebtedness.

RAILROAD BONDS.

In the first mortgage bonds of a railroad company incorporated in any of the New England States and whose road is located wholly or in part in the same, whether such corporation is in possession of and is operating its own road or has leased it to another railroad corporation, and has earned and paid regular dividends of not less than three per cent. per annum on all its issues of capital stock for the two years last preceding such investment.

In the first mortgage bonds of a railroad company incorporated in any of the New England States, and whose road is located wholly or in part in the same, guaranteed by the railroad company described in the preceding paragraph, which is in possession of and is operating its own road.

In the bonds or notes of a railroad company incorporated in this commonwealth and whose road is located wholly or in part therein, and is unencumbered by mortgage, and which has paid a dividend of not less than five per cent. per annum for two years preceding such investment.

In the bonds and notes of the Fitchburg Railroad Company issued according to law.

In the bonds and notes of the Old Colony Railroad Company issued according to law, notwithstanding the mortgages on that part of its railroad formerly belonging to the Boston, Clinton, Fitchburg and New Bedford Railroad Company.

In the bonds and notes of the Boston and Lowell Railroad Corporation issued according to law, notwithstanding the mortgages on those portions of its railroad formerly belonging to the Salem and Lowell Railroad Company and the Lowell and Lawrence Railroad Company.

In the bonds and notes of the Boston and Maine Railroad issued according to law, notwithstanding any mortgages on that part of its railroad, franchises and property formerly belonging to the Eastern Railroad Company, the Eastern Railroad in New Hampshire, or the Portsmouth, Great Falls and Conway Railroad.

In the bonds and notes of the New York, New Haven, and Hartford Railroad Company, issued according to law, notwithstanding the existence on the twenty-first day of March, in the year eighteen hundred and ninety-six, of a mortgage indebtedness not then matured upon the whole or a part of the road of said railroad company.

In the first mortgage bonds of the Concord and Montreal Railroad, although such company may be formed by the union of two or more companies only one of which has paid regular dividends for the two years last preceding such investment on all its issues of capital stock, and notwithstanding a mortgage indebtedness on that part of its road formerly belonging to the Boston, Concord and Montreal Railroad; provided, however, that said bonds shall be issued in whole or in part to renew and refund said existing mortgage indebtedness, and that an amount of such bonds equal at the par value to the amount of such existing mortgage indebtedness shall, by the terms of the mortgage securing the same, be made applicable exclusively to the payment of such existing mortgage indebtedness, and, for the purpose of securing such payment at the maturity of the same, shall be deposited with and held by such trust company, incorporated in this commonwealth and doing business in the city of Boston as may be approved by the board of commissioners of savings-banks.

In the bonds of the Maine Central Railroad Company, known as the Consolidated Mortgage Bonds, notwithstanding the existence of a mortgage indebtedness not matured upon the whole or a part of the road of said railroad com-

pany; provided, however, that said bonds be issued in whole or in part to renew and refund said existing first mortgage indebtedness, and that an amount of such bonds equal at the par value to the amount of such existing mortgage indebtedness shall, by the terms of the mortgage securing the same, be made applicable exclusively to the payment of such existing mortgage indebtedness; and to secure such payment at the maturity of the same, said bonds shall be deposited with and held by such trust company incorporated in this commonwealth and doing business in the city of Boston as may be approved by the board of commissioners of savings-banks.

In the bonds of the New York and New England Railroad Company issued according to law, and for the payment of the principal and interest of which first mortgages, made as provided in chapter three hundred and one of the acts of the year eighteen hundred and eighty-eight are held as collateral security under an indenture of trust duly made and entered into for that purpose; provided, that the amount of the bonds so issued shall not exceed the amount of the mortgages so held in trust, and that no one of said mortgages shall exceed in amount the sixty per cent. of value of the real estate thereby mortgaged; and no investment in said bonds shall be made by such corporation except upon the report of not less than two members of the board of investment, who shall, according to their best judgment, certify to the value of the premises covered by each of said mortgages, and such report shall be filed and preserved with the records of the corporation.

The Boston Terminal Company to provide means to carry out the purposes of this act, may from time to time issue coupon or registered bonds, in sums of not less than one hundred dollars each, payable at periods not exceeding one hundred years from the date thereof, bearing interest not exceeding four per cent. per annum, payable annually, semi-annually, or quarterly, to such an amount as may be necessary and as may be approved by the board of railroad commissioners. * * * Any such mortgage shall be made to a trustee or trustees approved in writing by the board of savings-bank commissioners, and savings-banks and institutions for savings may invest in such bonds when so secured.

In the bonds of the Boston, Revere Beach and Lynn Railroad Company, issued according to law.

In the legally authorized bonds of the New York Central and Hudson River Railroad Company, of the Michigan Central Railroad Company, of the Lake Shore and Michigan Southern Railway Company, of the Illinois Central Railroad Company, of the Pennsylvania Railroad Company, of the Delaware, Lackawanna and Western Railroad Company, of the Chicago, Burlington and Quincy Railroad Company, of the Chicago and Northwestern Railway Company, and the Delaware and Hudson Canal Company; provided, that all such bonds shall be secured by a first mortgage of the whole or a part of the railroad and railroad property actually in the possession of and operated by such company; and that each railroad whose bonds are hereby authorized for investment shall have earned and paid regular dividends on all its issues of capital stock of not less than four per cent. each fiscal year for the ten years next preceding such investment, and that such capital stock shall equal or exceed in amount one-third of the par value of its bonded indebtedness.

In the legally authorized bonds of a railroad company incorporated under the authority of the States of New York, Pennsylvania, Ohio, Indiana, Illinois, or Iowa, whose road is located wholly or in part within the limits of said States, and has earned and paid regular dividends of not less than four per centum per annum on all its issues of capital stock for the ten years last preceding such investment; provided, said bonds shall be secured by a first mortgage of the whole or a part of the railroad and railroad property of such company, and be guaranteed, both principal and interest, by one or more of the companies named in the preceding paragraph.

STREET RAILWAY BONDS.

Savings-banks and institutions for savings may invest their deposits and the income derived therefrom in the bonds, approved by the board of commissioners

of savings-banks, as hereinafter provided for, of any street railway company incorporated in this Commonwealth, the railway of which is situated wholly or partly therein, and which has earned and paid annually for the five years last preceding the certification hereinafter provided for, of the board of railroad commissioners, dividends of not less than five per cent. per annum upon all its outstanding capital stock. In any case where two or more companies have been consolidated by purchase or otherwise during the five years prior to the certification aforesaid the payment severally from the earnings of each year of dividends equivalent in the aggregate to a dividend of five per cent. upon the aggregate capital stocks of the several companies during the years preceding such consolidation, shall be sufficient for the purpose of this act. Dividends paid to the stockholders of the West End Street Railway Company by way of rental shall be deemed to have been earned and paid by said West End Street Railway Company within the meaning of this section.

The board of railroad commissioners shall on or before the fifteenth day of January of each year transmit to the board of commissioners of savings-banks a list of all street railway companies which appear from the returns made by said companies to have properly paid, without impairment of assets or capital stock, the dividends required by the preceding section.

The board of commissioners of savings-banks shall as soon as may be after the r ceipt of the lists provided for in the preceding section, prepare a list of such bonds issued by any street railway company and certified by the board of railroad commissioners, in accordance with the provisions of the preceding section, as the board of commissioners of savings-banks shall deem good and safe securities for the investments of savings-banks and institutions for savings. Such lists at all times to be kept open to the inspection of the public.

(Section 26, Chap. 113 of the revised statutes as amended by Chap. 178, L. of 1896; Chap. 516, L. of 1896; Chap. 262, L. of 1897; Chap. 148, L. of 1898; Act of 1899; Chap. 483, L. of 1902; L. of 1905.)

STATE OF MICHIGAN.

A savings-bank shall keep on hand at least fifteen per cent. of its total deposits, one-third of which reserve shall be in lawful money in its own vaults, and the balance on deposit, payable on demand in banks, national or State, in cities approved by the Commissioners as reserve cities, or invested.

GOVERNMENT BONDS.

In United States bonds. Three-fifths of the remainder of its savings deposits shall be invested by the board of directors in bonds of the United States.

STATE AND MUNICIPAL BONDS.

Or in the bonds of this State, or in the bonds of any other State of the United States; provided, that such State has not, in the years preceding the time of such investment, repudiated its debt and failed to pay the same or the interest thereon or upon any part of such debt.

Or in the public debt or bonds of any city, county, township, village or school district of any State or Territory in the United States which shall have been authorized by the Legislature of such State or Territory; provided, the total indebtedness of such municipality does not exceed five per cent. of the assessed valuation.

RAILROAD BONDS.

In the legally authorized first mortgage bonds of any steam railroad corporation organized under the laws of any State of the United States; provided, that such company has for five years prior to the time of making such investment by said bank, paid annually dividends equal to not less than four per cent. on its entire capital stock, and has not during said period defaulted in the payment of the matured principal or interest of any debts incurred by it and

secured by mortgage or trust deed upon its property or any part thereof, or in the payment of any part of the matured principal or interest of any bonds guaranteed or assumed by it; or

In the first mortgage bonds of railroad companies whose lines are leased or operated or controlled by any railroad company specified in paragraph (c) [preceding] of this section, if said bonds be guaranteed both as to principal and interest by the railroad company to which said lines are leased or by which they are operated or controlled;

In the legally authorized mortgage bonds of any steam railroad incorporated under the laws of any State of the United States, which shall have been issued for the purpose of retiring all prior mortgage indebtedness on so much of the property of such company as is covered by the mortgage securing such issue of bonds, and further providing for additions, extensions, or improvements; provided, that such company has for hree years prior to the time of making such investment by said bank paid annually dividends equal to not less than four per cent. on its entire capital stock, which capital stock shall equal or exceed in amount one-third of the par value of all its bonded indebtedness, and has not during the same period defaulted in the payment of the matured principal or interest of any debts incurred by it and secured by mortgage or trust deed upon its property or any part thereof, or in the payment of any part of the matured principal or interest upon a bond guaranteed or assumed by it; provided, said issues of bonds shall have been approved by the securities commission, hereinafter provided for;

In the legally authorized first mortgage bonds of any electric railroads street railway, gas, or electric light or power company, organized under the laws of the State of Michigan; provided, that such company has for five years prior to the time of making such investment by said bank paid annually dividends equal to not less than four per cent. on its entire capital stock, and has not during the same period defaulted in the payment of the matured principal or interest of any debts incurred by it and secured by mortgage or trust deed upon its property or any part thereof, or in the payment of any part of the matured principal or interest of any bonds guaranteed or assumed by it; or in the first mortgage bonds of any such company which has been in operation less than five years; provided, that the cost of construction and equipment of the plant of such company shall exceed by at least fifty per cent. the amount of the entire bonded indebtedness of such company, and the said plant and equipment shall be free from all other liens and encumbrances, and the said company shall have earned during the period it has been in operation more than enough to pay all interest accrued on all said bonds and not less than four per cent. per annum dividends upon its entire capital stock outstanding; provided, said issues of bonds shall have been approved by the securities commission hereinafter provided for;

In the legally authorized first mortgage bonds of steamship companies; provided, that such mortgages shall be upon steel steamship or steamships for the carriage of freight and passengers combined, upon the Great Lakes and connecting waters, of at least five thousand tons' carrying capacity each; provided, such bonds are issued at the time of completion and enrollment of such steamship or steamships, or within one year thereafter; and provided, further, that by the express terms of said mortgage at least ten per cent. of the total issue of said bonds shall be retired annually, beginning within two years from the date of said bonds, and that the mortgage liability against said property shall not exceed one-half of its actual cost; and provided, further. that the trustee of such mortgage shall be required to protect the lien of said mortgage by attending to the recording thereof and by causing property covered by said mortgage to be insured against all risks on vessel property ordinarily covered by such insurance, including marine risks and disasters, general and particular average, collision liability, protection and indemnity insurance, and insurance against liability for injuries to persons in insurance companies and under form of policies approved by the trustee, for an amount equal to the full insurable value of such steamship, such insurance to be made with a loss payable to said trustee and the policies deposited with it; and provided, further, that there

shall be filed with the Commissioner of the Banking Department of this State a schedule of the insurance upon such property, which schedule shall be signed by the trustee under said mortgage, and shall be accompanied by the certificate of said trustee that the policies mentioned in said schedule are held by said trustee and are payable to said trustee in case of loss for the benefit of the holders of the outstanding bonds issued under such mortgage; and further, that similar certificates be filed from time to time by said trustee with said Commissioner of the Banking Department of this State evidencing renewals of said insurance by proper policies or legal insurance binders; provided, further, that by the terms of such mortgage the mortgagor shall not suffer such steamship to become indebted in an amount exceeding five per cent. of the original amount of the principal of said mortgage at any time, and that the failure of the mortgagor to forthwith procure the release of such steamship or steamships, from mechanics', laborers', admiralty, statutory or other liens, claims or charges against such steamship, shall constitute a default in the provisions of such mortgage; and provided, further, that such bonds shall have been approved by the securities commission hereinafter provided for.

Said banks may loan the same upon negotiable paper, or other evidences of indebtedness, secured by any of the above-mentioned classes of security.

(Section 27, Banking Laws, as amended.)

STATE OF MINNESOTA.

It shall be lawful for the trustees of any savings-bank to invest the moneys deposited therein only as follows, to wit:

GOVERNMENT BONDS.

In the bonds, or other interest-bearing obligations of the United States, or in the securities for whose payment of principal and interest the faith of the United States is pledged.

In the bonds of any State in the United States which has not defaulted in the payment of any bonded debt within ten years prior to the time of its making such investment.

In the bonds of any city, county, town, village, school district, drainage district, or other district created pursuant to law for public purposes or improvements in the States of Minnesota, Wisconsin, Iowa, North Dakota, and South Dakota, or in any warrant order or interest-bearing obligation issued by the State, city (or any city board), or township, or county within the State; or in the bonds of any city, county, town, village, school district, drainage district, or other district created pursuant to law for public purposes or improvements in the United States which had at least thirty-five hundred (3,500) inhabitants as determined by the State or United States census taken next preceding the issue of said bonds; provided the bonded indebtedness of any such city, county, town, village, school district, drainage district, or other district shall not exceed the per centum upon its assessed valuation.

RAILROAD BONDS.

In the bonds of any railroad company, or the successor of any railroad company, which has received a land grant from the Government of the United States and which are secured by first lien upon its railroad.

In the bonds of any other railroad company which are secured by first lien upon a railroad within the United States, or in the mortgage bonds of any such railroad company of an issue to retire all prior mortgage indebtedness of such railroad company, or in the bonds of any railroad company within the United States which are guaranteed or assumed by another railroad company within the United States, provided that the railroad company (except a railroad company whose bonds are guaranteed or assumed as aforesaid), either issuing, guaranteeing, or assuming any of said bonds has not within five years prior to the time of making such investment by said bank, failed in the payment of a divi-

dend upon its entire capital stock outstanding of not less than four (4) per cent. per annum each fiscal year during said five years prior, and has not within five years prior to the time of making such investment by said bank defaulted in the payment of any part of the principal or interest of any debt incurred by it and secured by mortgage or trust deed, upon its railroad, or any part thereof, or in the payment of any part of the principal or interest of any bonds guaranteed or assumed by it; and provided further, that no savings-bank shall ever loan upon, or invest in, railroad bonds to exceed in the aggregate twenty (20) per cent. of its deposits; nor shall such savings-bank ever loan upon or invest in the bonds issued, guaranteed, or assumed by any one railroad company to exceed in the aggregate five (5) per cent. of its deposits. And it shall also be lawful to invest any of its capital or the moneys under its control in the debenture stock of any railway company owning and operating a line of road in whole or in part within the State of Minnesota; provided, that said debenture stock shall bear at least four per cent. interest per annum, and shall be secured by trust deed as a first lien upon said line of railway; provided, that no savings-bank shall ever loan upon or invest in the debenture stock of any one railroad company to exceed in the aggregate five (5) per cent. of its deposits.

(Section 2652, Stat. of Minn., as amended; Chap. 297, L. of 1901, and 108–273, Laws of 1903.)

Note—The above act does not apply to savings-banks organized prior to 1879.

STATE OF MISSOURI.

All sums received, except those held as bailee for safe-keeping and storage only, and the income derived therefrom, shall be invested only as follows:

GOVERNMENT BONDS.

In bonds or interest-bearing notes or obligations of the United States, or those for which the faith of the United States is pledged for the payment of the interest and principal.

STATE AND MUNICIPAL BONDS.

In bonds of this State bearing interest.

In bonds of any State in the Union that has not, within five years previous to making such investments by such corporations, defaulted in the payment of any part of either principal or interest thereof.

In bonds of any city, county, town, township, or school district of this State that has not defaulted in the payment of any part of either principal or interest thereof within five years previous to making such investment; and provided, such bonded debt does not exceed five per cent.

In the bonds of any city, town or county which has, in each case, at the time of investment, more than twenty thousand inhabitants, as ascertained by the United States or State census, made next preceding such investments, in the States of Illinois, Ohio, Indiana, Michigan, Iowa, Kansas, Nebraska, Wisconsin, Colorado, or Texas, issued pursuant to the authority of any law of such States; provided, the entire bonded indebtedness of such city or county shall not exceed five per cent. of the assessed value of the taxable property therein, including the issue of bonds in which said investment is made, as shown by the last assessment preceding the investment; and provided, further, that such city, town, county, or State in which it is situated has not defaulted in the payment of any part of either principal or interest thereof within five years previous to making such investment.

It shall not be lawful for any savings institution organized under this article to invest more than twenty-five per cent. of its assets in the bonds of cities, towns, or counties situated outside of this State, nor to invest more than three per cent. of its assets in the bonds of any one of such cities, towns, or counties, nor to invest in more than ten per centum of all the bonds issued by any such city, town, or county, nor to make any investment in the bonds of any

city, town, or county situated out of this State which has been or shall be issued to aid in the construction of any railroad. * * *

RAILROAD BONDS.

In the first mortgage bonds of any steam railway, the income of which is sufficient to pay all operating expenses and fixed charges, and which is completed and operated, wholly or in part, in the following named States: Missouri, Indiana, Iowa, Minnesota, Kansas, Nebraska, Colorado, Michigan, Illinois, Wisconsin, Arkansas, Texas, and Ohio, and which has paid the interest as it became due on its bond for three years next preceding such investment, or in the first mortgage bonds of the Central Pacific, Northern Pacific, Union Pacific, New York Central, Pennsylvania, and West Short Railway Companies.
(Laws of 1891, p. 86. Act of April 3.)

STATE OF NEBRASKA.

The funds of any savings-bank, except the reserve provided for in this act, shall be invested:

GOVERNMENT BONDS.

In bonds of the United States.

STATE AND MUNICIPAL BONDS.

Or of any State in the United States, or in the public debt of bonds of any city, county, township, village, or school district of any State of the United States, which shall have been authorized by the Legislature of the State. * * *
(Act of August 1, 1895, Sec. 31.)

STATE OF NEW HAMPSHIRE.

On and after the passage of this act, savings-bank and savings departments of banking and trust companies shall make investment of their funds in the following classes of securities only * * *

GOVERNMENT BONDS.

In the public funds of the United States or those for which the faith of the United States is pledged to provide for the payment of the interest and principal.

STATE AND MUNICIPAL BONDS.

In the bonds and notes of this State, or of any county, city, town, precinct, or district of this State.

In the authorized bonds or notes of any State or Territory of the United States, and in the bonds or notes of any city of the States of Maine, Vermont, Massachusetts, Rhode Island, Connecticut, or New York, whose net indebtedness does not exceed five per cent. of the last preceding valuation of the property therein for taxation, or of any county or town in said States whose net indebtedness does not exceed three per cent. of such valuation.

In the authorized bonds of any county, city, town, school district, or other municipal corporation of any other of the United States or Territories whose net indebtedness at the time of such investment does not exceed five per cent. of the last preceding valuation of the property therein for taxation; and in the authorized bonds of any city of one hundred thousand inhabitants of any of said States whose net indebtedness does not exceed seven per cent. of the last preceding valuation of the property therein for taxation.

The term "net indebtedness" shall be construed to denote the indebtedness of any city, town, or other municipal corporation, omitting the debt

created for supplying the inhabitants with water and deducting the amount of any sinking fund available for the payment of the municipal indebtedness.

Provided, however, that such bonds shall not have been issued in aid of railroads or for special assessment purposes. Provided, also, that the bonds of any county, city, or town, of less than ten thousand inhabitants, or of any school district or other municipal corporation of less than two thousand inhabitants in any State or Territory, other than the States of Maine, Vermont, Massachusetts, Rhode Island, Connecticut, or New York, shall not be authorized investments. Provided, further, that such bonds are issued by municipalities that are permitted by law to levy taxes sufficient to pay the interest and to provide sinking funds for their debt; otherwise such bonds shall not be authorized investments. And provided, further, that the bonds of any such county, city, town, school district, or other municipal corporation, of any State or Territory, except the States of Maine, Vermont, Massachusetts, Rhode Island, Connecticut, or New York, which does not have a constitutional provision limiting the indebtedness of counties, cities, towns, school districts, or other municipal corporations therein, shall not be legal investments; but not exceeding fifty per cent. of the deposits shall be so invested.

RAILROAD BONDS.

In the bonds or notes of any railroad company, except street railways, incorporated under the laws of this State, whose road is located wholly or in part in the same, but not exceeding twenty-five per cent. of the deposit shall be so invested.

In the bonds of any railroad company, except street railways, incorporated under the authority of any of the New England States, whose road is located wholly or in part in the same, and which is in possession of and operating its own road, and has earned and paid regular dividends for the two years next preceding such investment, or in the bonds guaranteed or assumed by such railroad company; but not exceeding twenty-five per cent. of the deposits shall be so invested.

In the bonds of any railroad company, except street railways, incorporated under the authority of any of the United States or Territories, which is in possession of and operating its own road, and has earned and paid regular dividends of not less than four per cent. per annum on its capital stock for the three years next preceding such investment; provided, such capital stock on which it earns and pays dividends equal in amount one-third of the entire bonded indebtedness of said road; or in the bonds guaranteed or assumed by such railroad; but not exceeding twenty-five per cent. of the deposits shall be so invested.

STREET RAILWAY BONDS.

In the bonds of street railway corporations incorporated under the laws of this State, and located wholly or in part in the same; and in the bonds of street railway corporations located wholly or in part in cities of thirty thousand inhabitants or more, in any of the other New England States; and in the bonds of street railway corporations located wholly or in part in cities of fifty thousand inhabitants, or more, in any of the United States, when the net indebtedness of such street railway corporations does not exceed the capital stock actually paid in and remaining unimpaired at the time of such investment, and that has earned and paid regular dividends of not less than four per cent. per annum on its capital stock for five years next preceding such investment; but not exceeding ten per cent. of the deposits shall be so invested.

TELEGRAPH AND TELEPHONE BONDS.

In the bonds of telephone, telegraph, or express companies doing business in the United States or Territories, provided the total indebtedness of such company does not exceed its capital actually paid in and remaining unimpaired,

and provided such company has earned and paid regular dividends of at least four per cent. per annum upon its capital stock of shares for five years previous to such investment; but not exceeding ten per cent. of the deposits shall be so invested.

In the first mortgage bonds of corporations of this State, except street railways, located and doing business therein, whose net indebtedness at the time of such investment does not exceed its capital stock actually paid in and remaining unimpaired; but not exceeding ten per cent. of the deposits shall be so invested.

(Act of March 22, 1901. L. of N. H., 1901, p. 616 *et seq.*)

STATE OF NEW JERSEY.

It shall not be lawful from and after the passage of this act for any savings-bank, or other savings institution * * * to invest the moneys deposited with the same in any manner except as follows:

GOVERNMENT BONDS.

In the stocks or bonds or interest-bearing notes or obligations of the United States, or those for which the faith of the United States is distinctly pledged to provide for the payment of the principal and interest thereof.

In the interest-bearing bonds of this State.

In the bonds of any State in the Union that has not, within ten years previous to making such investment by any such bank or institution, defaulted in the payment of any part of either principal or interest in any debt authorized by any Legislature of such State to be contracted.

In the stocks or bonds of any city, town, county or village of this State, issued pursuant to any law of this State, or of the cities of New York, Brooklyn, and Philadelphia, or in any interest-bearing obligations (other than those commonly known as improvement certificates), issued by the city, town, or borough in which such bank or institution shall be located.

* * * In the bonds of any city or county of any State of the United States of America, which have been or may be issued pursuant to the authority of any law of any such State; provided, no such city or county has, within ten years previous to making such investment, defaulted in the payment of any part of either principal or interest of any debt authorized by law of such State to be contracted; and provided, further, that the total indebtedness of any such city or county is limited by law to ten per centum of its assessed valuation.

The managers of any savings-bank may invest its moneys in the bonds of any school district which by law are charged upon the property of all the inhabitants of such district, which school district has not within ten years previous to making such investment defaulted in the payment of either principal or interest of any debt authorized to be contracted by it.

* * * It shall be lawful for any * * * savings-bank or savings institution, incorporated under the law of this State, to invest moneys belonging to or deposited with it in any bonds authorized by the laws of this State to be issued by any commission appointed by the Supreme Court of this State by virtue of any law of this State.

RAILROAD BONDS.

It shall be lawful for any savings-bank in this State to invest its funds in first mortgage bonds of any railroad company which has paid dividends of not less than four per centum per annum regularly, on their entire capital stock, for a period of not less than five years next previous to the purchase of such bonds, or in any consolidated mortgage bonds of any such company authorized to be issued to retire the entire bonded debt of such company.

(Act of April 21, 1876, as amended April 5, 1878, April 5, 1886, March 7, 1889, March 30, 1896, and April 9, 1897.)

STATE OF NEW YORK.

An act to amend the banking law, relative to securities in which deposits in savings-banks may be invested.

Section 1. Subdivision 5 of section 116 of chapter 689 of the laws of 1892, entitled "An act in relation to banking corporations," as amended by chapter 440 of the laws of 1893, chapter 813 of the laws of 1895, chapter 454 of the laws of 1896, chapter 386 of the laws of 1897, and chapter 598 of the laws of 1902, is hereby amended to read as follows:

5. In the stocks or bonds of any incorporated city situated in one of the States of the United States which was admitted to Statehood prior to Jan. 1, 1896, and which, since Jan. 1, 1861, has not repudiated or defaulted in the payment of any part of the principal or interest of any debt authorized by the Legislature of any such State to be contracted, provided said city has a population, as shown by the Federal census next preceding said investment, of not less than 45,000 inhabitants, and was incorporated as a city at least twenty-five years prior to the making of said investment, and has never defaulted for more than ninety days in the payment of any part either of principal or interest of any bond, note, or other evidence of indebtedness, or effected any compromise of any kind with the holders thereof. If at any time the indebtedness of any such city, together with the indebtedness of any district, or other municipal corporation or subdivision, except a county, which is wholly or in part included within the bounds or limits of said city, less its water debt and sinking funds, shall exceed 7 per cent. of the valuation of said city for purposes of taxation, its bonds and stocks shall thereafter, and until such indebtedness shall be reduced to 7 per cent. of the valuation for the purposes of taxation, cease to be an authorized investment for the moneys of savings-banks; but the superintendent of the banking department may, in his discretion, require any savings-bank to sell such bonds or stock of said city as may have been purchased prior to said increase of debt.

Sec. 2. Subdivision 6 of section 116 of said chapter, as amended by chapter 813 of the laws of 1895, chapter 236 of the laws of 1898, chapter 386 of the laws of 1899, chapter 42 of the laws of 1900, chapter 440 of the laws of 1902, and chapter 640 of the laws of 1903, is hereby amended to read as follows:

6. In bonds and mortgages on unencumbered real property situated in this State, to the extent of 60 per cent. of the value thereof. Not more than 65 per cent. of the whole amount of deposits shall be so loaned or invested. If the loan is on unimproved and unproductive real property, the amount loaned thereon shall not be more than 40 per cent. of its actual value. No investment in any bonds and mortgages shall be made by any savings-bank, except upon the report of a committee of its trustees charged with the duty of investigating the same, who shall certify to the value of the premises mortgaged or to be mortgaged, according to their best judgment, and such report shall be filed and preserved among the records of the corporation. Also in the following securities:

GOVERNMENT BONDS.

In the stocks or bonds or interest-bearing notes or obligations of the United States, or those for which the faith of the United States is pledged to provide for the payment of the interest and principal, including the bonds of the District of Columbia.

STATE AND MUNICIPAL BONDS.

In the stocks or bonds or interest-bearing obligations of this State, issued pursuant to the authority of any law of the State.

In the stocks or bonds or interest-bearing obligations of any State of the United States, which has not within ten years previous to making such investment by such corporation defaulted in the payment of any part of either principal or interest of any debt authorized by the Legislature of any such State to be contracted; and in the bonds of interest-bearing obligations of any State of the United States, issued in pursuance of the authority of the Legislature of

such State, which have prior to the passage of this act been issued for the funding or settlement of any previous obligation of such State theretofore in default, and on which said funding or settlement obligation there has been no default in the payment of either principal or interest since the issuance of such funded or settlement obligation, and provided the interest on such funded or settlement obligation has been paid regularly for a period of not less than ten years next preceding such investment.

In the stocks or bonds of any city, county, town, or village, school district bonds and union free school district bonds issued for school purposes, or in the interest-bearing obligations of any city or county of this State, issued pursuant to the authority of any law of the State for the payment of which the faith and credit of the municipality issuing them are pledged.

RAILROAD BONDS.

(a) The first mortgage bonds of any railroad corporation of this State, the principal part of whose railroad is located within this State, or of any railroad corporation of this or any other State or States connecting with and controlled and operated as a part of the system of any such railroad corporation of this State, and of which connecting railroad at least a majority of its capital stock is owned by such a railroad corporation of this State or in the mortgage bonds of any such railroad corporation of an issue to retire all prior mortgage debt of such railroad companies respectively; provided, that at no time five years next preceding the date of any such investment shall such railroad corporation of this State or such connecting railroad corporation respectively have failed regularly and punctually to pay the matured principal and interest of all its mortgage indebtedness, and in addition thereto regularly and punctually to have paid in dividends to its stockholders during each of said five years an amount at least equal to four per centum upon all its outstanding capital stock; and provided, further, that at the date of every such dividend the outstanding capital stock of such railroad corporation, or such connecting railroad company respectively shall have been equal to at least one-third of the total mortgage indebtedness of such railroad corporations respectively, including all bonds issued or to be issued under any mortgage securing any bonds in which such investment shall be made.

(b) The mortgage bonds of the following railroad corporations: The Chicago and Northwestern railroad company, Chicago, Burlington and Quincy railroad company, Michigan Central railroad company, Illinois Central railroad company, Pennsylvania railroad company, Delaware and Hudson company, Delaware, Lackawanna and Western railroad company, New York, New Haven and Hartford railroad company, Boston and Maine railroad company, Maine Central railroad company, the Chicago and Alton railroad company, Morris and Essex railroad company, Central railroad of New Jersey, United New Jersey railroad and canal company; also in the mortgage bonds of railroad companies whose lines are leased or operated or controlled by any railroad company specified in this paragraph, if said bonds be guaranteed both as to principal and interest by the railroad company to which said lines are leased or by which they are operated or controlled. Provided, that at the time of making investment authorized by this paragraph the said railroad corporations issuing such bonds shall have earned and paid regular dividends of not less than four per centum per annum in cash on all their issues of capital stock for the ten years next preceding such investment; and provided, the capital stock of any said railroad corporations shall equal or exceed in amount one-third of the par value of all its bonded indebtedness; and further provided, that all bonds authorized for investment by this subdivision shall be secured by a mortgage which is a first mortgage on either the whole or some part of the railroad and railroad property of the company issuing such bonds, or that such bonds shall be mortgage bonds of an issue to retire all prior mortgage debts of such railroad company; provided, further, that the mortgage whch secures the bonds authorized by this subdivision is dated, executed, and recorded prior to January first, nineteen hundred and five.

(c) The mortgage bonds of the Chicago, Milwaukee and St. Paul railway company, and the Chicago, Rock Island and Pacific railway company, so long as they shall continue to earn and pay at least four per centum dividends per annum on their outstanding capital stock; and provided, their capital stock shall equal or exceed in amount one-third of the par value of all their bonded indebtedness; and further provided, that all bonds of either of said companies hereby authorized for investment shall be secured by a mortgage which is a first mortgage on either the whole or some part of the railroad or railroad property actually in the possession of and operated by said company, or that such bonds shall be mortgage bonds of an issue to retire all prior debts of said railroad company: provided, further, that the mortgage which secures the bonds authorized by this subdivision is dated, executed and recorded prior to January first, nineteen hundred and five.

(d) The first mortgage bonds of the Fonda, Johnstown and Gloversville railroad company, or in the mortgage bonds of said railroad company of an issue to retire all prior mortgage debts of said railroad company; and provided, the capital stock of said railroad company shall equal or exceed in amount one-third of the par value of all its bonded indebtedness; and provided, also, that such railroad be of standard gauge of four feet eight and one-half inches, and in the mortgage bonds of the Buffalo Creek railroad company of an issue to retire all prior mortgage debts of said railroad company, provided that the bonds authorized by this subdivision are secured by a mortgage dated, executed and recorded prior to January first, nineteen hundred and five.

(e) The mortgage bonds of any railroad corporation incorporated under the laws of any of the United States, which actually owns in fee not less than five hundred miles of standard gauge railway exclusive of sidings, within the United States, provided that at no time within five years next preceding the date of any such investment shall such railroad corporation have failed regularly and punctually to pay the matured principal and interest of all its mortgage indebtedness, and in addition thereto regularly and punctually to have paid in dividends to its stockholders during each of said five years an amount at least equal to four per centum upon all its outstanding capital stock; and provided, further, that during said five years the gross earnings in each year from the operations of said company, including therein the gross earnings of all railroads leased and operated or controlled and operated by said company, and also including in said earnings the amount received directly or indirectly by said company from the sale of coal from mines owned or controlled by it, shall not have been less in amount than five times the amount necessary to pay the interest payable during that year upon its entire outstanding indebtedness, and the rentals for said year of all leased lines, and further provided that all bonds authorized for investment by this subdivision shall be secured by a mortgage which is at the time of making said investment or was at the date of the execution of said mortgage (1) a first mortgage upon not less than seventy-five per centum of the railway owned in fee by the company issuing said bonds exclusive of sidings at the date of said mortgage or (2) a refunding mortgage issued to retire all prior lien mortgage debts of said company outstanding at the time of said investment and covering at least seventy-five per centum of the railway owned in fee by said company at the date of said mortgage. But no one of the bonds so secured shall be a legal investment in case the mortgage securing the same shall authorize a total issue of bonds which together with all outstanding prior debts of said company, after deducting therefrom in case of a refunding mortgage, the bonds reserved under the provisions of said mortgage to retire prior debts at maturity, shall exceed three times the outstanding capital stock of said company at the time of making said investment. And no mortgage is to be regarded as a refunding mortgage, under the provisions of this act, unless the bonds which it secures mature at a later date than any bond which it is given to refund, nor unless it covers a mileage at least twenty-five per centum greater than is covered by any one of the prior mortgages so to be refunded.

(f) Any railway mortgage bonds which would be a legal investment under the provisions of subdivision (e) of this section, except for the fact that the

railroad corporation issuing said bonds actually owns in fee less than five hundred miles of road, provided that during five years next preceding the date of any such investment the gross earnings in each year from the operations of said corporation, including the gross earnings of all lines leased and operated or controlled and operated by it, shall not have been less than ten million dollars.

(g) The mortgage bonds of a railroad corporation described in the foregoing subdivisions (e) or (f) or the mortgage bond of a railroad owned by such corporation, assumed or guaranteed by it by endorsement on said bonds, provided said bonds are prior to and are to be refunded by a general mortgage of said corporation, the bonds secured by which are made a legal investment under the provisions of said subdivisions (e) or (f); and provided, further, that said general mortgage covers all the real property upon which the mortgage securing said underlying bonds is a lien.

(h) Any railway mortgage bonds which would be a legal investment under the provisions of subdivisions (e) or (g) of this section, except for the fact that the railroad corporation issuing said bonds actually owns in fee less than five hundred miles of road, provided the payment of principal and interest of said bonds is guaranteed by endorsement thereon, or provided said bonds have been assumed by a corporation whose first mortgage, or refunding mortgage bonds, are a legal investment under the provisions of subdivision (e) or (f) of this section. But no one of the bonds so guaranteed or assumed shall be a legal investment in case the mortgage securing the same shall authorize a total issue of bonds which, together with all the outstanding prior debts of the corporation making said guarantee or so assuming said bonds, including therein the authorized amount of all previously guaranteed or assumed bond issues, shall exceed three times the capital stock of said corporation, at the time of making said investment.

(i) The first mortgage bonds of a railroad the entire capital stock of which, except shares necessary to qualify directors, is owned by, and which is operated by a railroad whose last issued refunding bonds are a legal investment under the provisions of subdivisions (a), (e), or (f) of this section, provided the payment of principal and interest of said bonds is guaranteed by endorsement thereon by the company so owning and operating said road, and further provided the mortgage securing said bonds does not authorize an issue of more than twenty thousand dollars in bonds for each mile of road covered thereby. But no one of the bonds so guaranteed shall be a legal investment in case the mortgages securing the same shall authorize a total issue of bonds which together with all the outstanding prior debts of the company making said guarantee, including therein the authorized amount of all previously guaranteed bond issues, shall exceed three times the capital stock of said company, at the time of making said investment.

Not more than twenty-five per centum of the assets of any bank shall be loaned or invested in railroad bonds, and not more than ten per centum of the assets of any bank shall be invested in the bonds of any one railroad corporation described in paragrpah "a" of this subdivision, and not more thant five per centum of such assets in the bonds of any other railroad corporation.

In determining the amount of the assets of any bank under the provisions of this subdivision, its securities shall be estimated in the manner prescribed for determining the per centum of surplus by section 124 of this act. Street railroad corporations shall not be considered railroad corporations within the meaning of this subdivision.

(Chap. 689, L. of 1892; Chap. 440, L. of 1893; Chap. 813, L. of 1895; Chap. 454, L. of 1896; Chap. 386, L. of 1897; Chap. 598, L. of 1902; Chap. 401, L. of 1905.)

STATE OF OHIO.

The funds of such savings society may be invested:

GOVERNMENT BONDS.

* * * In the public funds of the United States.

STATE AND MUNICIPAL BONDS.

In the public funds of this State; in the bonds of any county or municipal corporation issued pursuant to any law of this State. (L. of 1867, S. 3812 G. St.)

Note.—The above provisions do not apply to savings-banks operating under special charters.

STATE OF PENNSYLVANIA.

It shall be lawful for the trustee of any savings-bank to invest money deposited therein only as follows:*

UNITED STATES BONDS.

In the stocks or bonds or interest-bearing notes, or the obligations of the United States, or those for which the faith of the United States is pledged, to provide for the payment of the interest and the principal.

STATE AND MUNICIPAL BONDS.

In the stocks or bonds of the Commonwealth of Pennsylvania bearing interest.

In the stocks or bonds of any State in the Union that has not within ten years previous to making such investment by such corporation defaulted in the payment of any part of either principal or interest of any debt authorized by any Legislature of such State to be contracted.

In the stocks or bonds of any city, county, town, or village of any State of the United States, issued pursuant to the authority of any law of the State, or in any interest-bearing obligations issued by the city or county in which such bank shall be situated.

(Sec. 17, P. L. 246, 20 May, 1899.)

STATE OF RHODE ISLAND

Institutions for savings shall invest their receipts.

GOVERNMENT BONDS.

In public stocks or bonds of the United States.

STATE AND MUNICIPAL BONDS.

In public stock or bonds of any State, or in the notes or bonds of any town or city, or in notes of any school district or fire district in any New England State.

Or in such corporate stocks or bonds as they may deem safe and secure.

(Rev. Stat., Chap. 178, Title 19, Sec. 54.)

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* This statute applies only to savings-banks without capital stock.

STATE OF VERMONT.

The moneys deposited in savings-banks, savings institutions, and trust companies, and the income derived therefrom, shall be invested only as follows:

GOVERNMENT BONDS.

In the public funds of the United States, or public funds for the payment of principal and interest of which the faith of the United States is pledged.

STATE AND MUNICIPAL BONDS.

In the bonds or notes of the counties, cities, towns, villages, and school districts of the New England States, New York, Pennsylvania, Ohio, Michigan, Indiana, Illinois, and Iowa.

In the municipal bonds, not issued in aid of railroads, of counties, cities, and towns of five thousand or more inhabitants in the States of New Jersey, Wisconsin, Minnesota, and Missouri, and in the counties, cities, and towns of ten thousand or more inhabitants in the States of Kansas, Nebraska, North Dakota, South Dakota, Oregon, and Washington; but no investment shall be made in any of the counties, cities, or towns in the States above named, except in cities of fifty thousand or more inhabitants where the municipal indebtedness of such county, city, or town exceeds five per cent. of its assessed valuation, and when not issued in aid of railroads.

In school bonds and independent school district bonds of New Jersey, Wisconsin, Minnesota, and Missouri, and in the school bonds and independent school district bonds of school districts of two thousand or more inhabitants in the States of Kansas, Nebraska, North Dakota, South Dakota, Oregon, and Washington, where the amount of such bonds issued does not exceed five per cent. of the assessed valuation of the respective cities, towns, school districts, or in the public funds of any of the States named in this section.

(Sec. 4101, Chap. 174, Vt. Stat.)

STATE OF WISCONSIN.

Any savings-bank authorized under this act may employ not exceeding one-half of its deposits * * *

GOVERNMENT BONDS.

In the purchase of the public stocks or bonds of the United States.

STATE AND MUNICIPAL BONDS.

The stocks or bonds of the Northwestern States, to wit: Ohio, Indiana, Michigan, Illinois, Iowa, Wisconsin, and Minnesota, of the authorized bonds of any incorporated city, village, town, or county in the aforesaid Northwestern States.

RAILROAD BONDS.

No such savings-bank shall invest any part of its deposits in the STOCK of any railroad company.

(Section 8, Chap. 384, L. of 1876.)

PART VII

Underwriting and Distributing Bonds

Underwriting.—In Alexander Hamilton's early reports as Secretary of the Treasury, says Alexander Dana Noyes, he refers repeatedly to transactions in the new republic's bonds with Dutch bankers. So far as appears, they bought the bonds at a price. But the proceeds available for the American Treasury were somewhat lessened by the "bonifications" or "gratuities" which the bankers exacted in addition to a discount from the par of the bonds. At the time they bought them, perhaps, there was no ready market for the bonds, although the bankers doubtless believed there would be in time. Or, it may be, what buyers there were were scattered and unknown to the agents of the American fisc. Buyers may have been unwilling to invest in the new and untried securities unless emphatically so advised by persons in whom they had trust. Waiting for a market meant the taking of chances, while the possession of a clientele implied expense and exertion in building it up. For the assumption of risks and the exertion of influence the bankers demanded and got a special reward.

Nowadays the "gratuity" is commonly called a commission, and bonification survives only as "bonus." But this class of special payment for bankers' services in supplying capital, quite aside from the payments of interest on money lent, is much larger and more varied than it was a hundred or even thirty years ago. Such payments, in fact, though sometimes they are only contingent payments, are the moving consideration in all the modern financial underwriting.

Financial underwriting and the underwriting synonymous with insurance are alike in so far as each involves the taking of risks. But the insurance company takes the risk of fire, death, or shipwreck; the financial underwriter assumes the chances of the markets. He agrees with the promisors upon certain bonds or the management of a company about to sell stock, to take at a previously fixed value all securities of a given issue to which the public generally or investors at large may not care to subscribe. In return for this undertaking he receives a commission upon the total amount sold to investors, and is generally permitted to buy the left-over securities at less than the price for which they were offered to the public. This is the process in its simpler form. Variations, however, are abundant. Those, for example, to whom the securities are offered first

may be the owners of various plants which are about to be united with a single consolidation. The underwriter in this case is the person who agrees himself to buy the stock and pay the money for it should the owners of the constituent concerns prefer to sell out for cash. Again, there may be question of acquiring a bankrupt railway against which large claims are outstanding, putting new money into the property, satisfying the claims of the creditors, and against the property as reorganized, issuing new types of securities.

Still a different variation is to be found in the operations lately undertaken in forming the United States Steel Corporation, the plan of exchanging a few new stocks for many and diverse old ones. Money was needed here, however, not only to provide working capital, but also to deal in the securities involved. In most respects the last three sorts of operation represent a higher development of underwriting than those mentioned first, but they also put the underwriter under somewhat greater risk. His reward comes from the difference between the securities received from the company in which he has taken an interest and the quantity of cash and securities disbursed. Sometimes the results in the final reckoning show the underwriter a heavy loss.

From one view the underwriter could be called a middleman between the borrower and the lender—the issuer of securities and those who finally buy them to keep. He exacts a toll from those who come to him, but, as a rule, he renders a service in return. The payment may be merely for his possession of large funds which he is willing to risk for a season in what his judgment approves. It may be a reward for looking up otherwise active capital during a fixed term, an indemnity for the expense of gradually recovering the cost of bonds on which the promisor desires to realize at once, a repayment for the work of past years in establishing connection with clients who will buy stocks on his advice, a price charged by him for the assurance that the venture will have his good will, or, finally, a gain filched by sharp practice from other persons whose interests the underwriting operation has touched.

For all the larger transactions, and for many of the smaller ones of the last two years, the underwriting has been taken by syndicates. The industrial consolidations, railway reorganization, issue of bonds or stock generally calls for too much capital to bring the matter within the power of a single individual or firm. And if not the amount of money, then the character of the risk or the promise of profits usually dictates a wider participation in the scheme. The underwriting syndicate is thus both a form of co-operation among bankers and a device,

through judicious distribution of favors to cement alliances, allay hostilities, and strengthen financial cliques.

The initiative in their formation may be taken either by those who want capital or by those who have it. Sometimes it is the promoter of an industrial consolidation who starts the ball rolling, but quite as often the banking interests with whom he is allied. In the latter case the banker himself assumes many of the characteristics of the promoter. Once the scheme is fixed, the character of the securities to be issued determined, and the terms of the agreement between borrowers and underwriters settled, those in charge of the operation invite participation. This consists in furnishing a part of the capital needed to carry out the plan. Those first asked to join are usually the firms and capitalists most closely related to the banking house first approached. If the project seems likely to yield large gains, the circle of participants is kept as small as may be. Often, however, as in a reorganization, there are elements to be conciliated: the principal holders, for example, of the prior liens against a railway which has become involved. These are not infrequently given a chance to take a stipulated share. Where the cash requirements were particularly large, and the project of first-rate importance, banking firms have not seldom sought to insure the benevolent neutrality of their principal rivals by offering them an opportunity to subscribe. Another type of participants is to be found among the clients of large banking firms, for whom and at whose risk the latter apply for a share. And in a number of the industrial promotions the owners of the plants merged have been drawn into the game. Only in the case of the least successful plans has a share in the underwriting been available for any one who asked for it.

The profits of underwriting have been as varied as the fortunes of the ventures it has been used to promote. Measured by the legal or market norm of interest rates, these returns would often seem extraordinarily high. And from one view, it must be owned, the distinction between the profits derived from such advances of capital and interest on more or less hazardous loans seems rather faint. In another aspect the difference is marked. Many syndicates buy the securities outright and sell them again. They take the risks of the *Konjunktur*. They play the chance that the general market and economic conditions will be favorable at the time their plans are to mature, as well as the chance that the enterprise they are backing will prove to be well conceived and rightly carried out. Then, too, the underwriter may engage in a promising venture, but one of which the gains are not for him. Time was when to be a member of such a syndicate was thought the same as "getting

in on the ground floor." Since then it has been proved by the operations of certain syndicates that underneath the ground floor there may be a basement, and besides that, a sub-cellar which is deeper yet. How badly many underwritings turned out is proverbial with those who recall the summer of 1899; how profitable some are esteemed is shown by the fact that participations in certain syndicates have sold before allotment at premiums of 20 to 50 per cent.

Underwriters, Distributio of Bonds by.—The National City Bank, the Bank of Commerce, the First National Bank, and half a dozen private banking houses in New York are quite generally spoken of in New York as "The Underwriters." They are practically the wholesale bond dealers.

The machinery that distributes over the world the steady stream of bonds created by American corporations is little understood outside of Wall Street itself. Only the result is noted—namely, that some companies can distribute these securities broadcast with apparent ease, while other companies, apparently of equal strength, appear unable to accomplish the same result without a long period of "digestion."

Roughly, there are three methods whereby a company can sell its bonds. One is to sell direct to the public through the Stock Exchange, or by actual canvas. Only new companies use the latter means, and bonds hawked around the country in this way are generally of low repute. The sale through the Stock Exchange is now generally carried out by the fiscal agents of the company, and is unusual except for the sale of small lots of well-known and active bonds.

A variation of this method is found in the case of Rock Island, for instance. The old stockholders of the railway company were offered $100 in 4 per cent. bonds, $70 in preferred stock, and $100 in Rock Island common. The result is well known. The new bonds went into the hands of a stockholding public, which had them at no stated price, and which sold them freely when the decline came. This method is now generally regarded as dangerous. It avoids the payment of commissions, and thereby makes enemies of the kind who can do most harm.

This first method of distribution is less popular year by year. It has come to be recognized that commissions must be paid to the bankers. In return, the bankers loan their credit to the bonds, placing them with their own public following. The commission is, to all intents, the price of the banker's credit. The commission, therefore, varies. If the company is weak and the banker strong, the commission is very heavy. If the company is strong and the banker weak, the latter is glad to take the bonds at a very slight profit.

The second general method is to sell the bonds in a block to one of the great underwriters. Pennsylvania, Baltimore & Ohio, Union Pacific, and many others sell direct to Kuhn, Loeb & Co., get the money, and thereafter take only an indirect interest in the bonds. Rock Island sells to Speyer & Co.; 'Frisco to Blair & Co., and others; New York Central, Lake Shore, Southern Railway, Erie, and others, to J. P. Morgan & Co. The price at which these railroads sell their bonds to the underwriters is not generally known. It is taken to be a private matter, but it often leaks out.

The third method, not uncommon, is to sell the bonds to the big retail bond houses, who distribute them to a wide and wealthy public through advertising and through correspondence. Each of these houses has its clientele. Some are strong in New York, others in Canada, others in the South, etc. They are more or less specialties, and get to be known for a particular grade of bonds or stocks.

These two last methods, of course, overlap greatly. Harvey Fisk & Sons, for instance, known for years as a big retail bond house of wide clientele, frequently underwrite whole issues of new securities, as do Fisk & Robinson. J. P. Morgan & Co., Kuhn, Loeb & Co., Speyer & Co., generally participate, to a greater or less extent, in any extensive new bond, because their clientele demands it, even though these firms may not be the original underwriters.

Another phase of the underwriting industry is the "underwriters' option." An underwriting firm takes a block of bonds at, say, 97, payable only if resold. The firm then offers the bonds at any price above 97, and pays over to the company 97 for the amount of bonds sold. In this class of underwriting, the company generally co-operates strongly with the bond house. A great deal of this class of business is carried on. Bond salesmen for big houses generally carry to outlying cities a commission to sell, at stated price, the bonds of a dozen or more railroads, none of whose bonds are actually owned by the house at the time. The bonds may be called at a given figure within a certain time.

It is a question how much of this business is done by the big underwriters. Doubtless, if the truth were known, a great many of the sales of big blocks of bonds are of this nature, but they are not generally published as such.

The reputation of the underwriters is a thing very jealously guarded. A foreign clientele is one of the most valuable assets possible, and a clear record in respect to coupons is a matter of high pride. When a house can say that none of the bonds it has sold to the public have ever defaulted, it can make a boast to be proud of.

Again, some houses have a reputation among the retail dealers for floating bonds at the top price, while others are considered more liberal. Bonds bought out by one house are considered bargains when issued; while bonds bought out by a near neighbor are generally expected to be better bargains in six months or so. This is a matter of local reputation. The bond dealers in the street know all these little things, but the savings-banks, the country at large, and the foreigners are not so keen.

Marketing $1,500,000,000 of Bonds a Year.—Wall Street banking houses sell directly to investors every year twenty times the amount of bonds sold to investors through the medium of the stock market. Here is a business in which more capital is engaged and greater profits are made than through speculation in stocks, for every year bonds representing $1,500,000,000 are marketed.

The largest single investors are the insurance companies. Their gross income is more than $550,000,000 a year. After the payment of operating expenses, the remaining sum is an investment fund. About $200,000,000 of it is invested in bonds. The savings-banks invest about $150,000,000, and the banks and trust companies another $150,000,000. Then a billion dollars' worth are sold to several million foreign and domestic investors.

Roughly speaking, there are two classes of bond dealers in Wall Street. The first class are the great underwriters—several of the largest national banks and a half-dozen private banking houses, like J. P. Morgan & Co., Speyer & Co., and Kuhn, Loeb & Co. Each of these private banking houses buys and sells, in a year, from $100,000,000 to $300,000,000 of bonds, making a profit of from $2,000,000 to $8,000,000. They are practically wholesale dealers in bonds. The retail dealers are more numerous. A number of these sell from $50,000,000 to $150,000,000 worth of bonds a year directly to investors through advertising and correspondence. Some of them deal exclusively in municipal bonds, others in steam railroad, electric railway, or industrial issues. The capital thus secured is used in developing our natural resources.

Each of the large wholesale bond dealers are the fiscal agents of certain large corporations. The Pennsylvania Railroad, the Baltimore & Ohio, the Norfolk & Western, the Union Pacific, the Southern Pacific, the Illinois Central, and other corporations sell their bonds to Kuhn, Loeb & Co. The United States Steel Corporation, the Southern Railway, the Erie, the New York Central, the Hocking Valley, the General Electric Company, the Lake Shore Railroad, the Atchison, the Northern Pacific, and

others sell theirs to J. P. Morgan & Co. Railroads like the Rock Island and the Mexican National and several foreign governments, like Cuba and Mexico, are usually represented by Speyer & Co. Foreign government bonds, to a large amount, have been sold by several Wall Street bond houses in the last few years. During 1904, foreign securities representing more than $150,000,000 were underwritten and sold by Kuhn, Loeb & Co. and Speyer & Co.

It is through the retail bond dealers that the great investing public of the country is reached. The other day a retired merchant died in Pittsburg whose wealth was estimated by bankers to exceed $50,000,000. Of the several million persons who read of his death in the newspapers the following morning only a few had ever heard his name before. There are thousands of similar capitalists in the United States, each possessing a fortune greater than was owned by any single individual in the country fifty years ago, whose names are entirely unknown to the average newspaper reader. There are several hundred thousand others who possess independent fortunes. It is with these individual investors that the retail bond merchant deals. All have a large list of wealthy customers, to which they are continually adding. The customers of some are mostly in New York or Pennsylvania, of others in New England, of others in Canada, of others in the West or the South. Some have wealthy foreign customers.

The number of regular customers may range from 5,000 to as high as 25,000. There is one retail bond house in Wall Street, which has been in business for seventy-five years, that has a list which could not be purchased for several million dollars. It includes 22,000 names, and these customers purchase, on an average, nearly $5,000 of bonds a year apiece, or a total of more than $100,000,000 a year. This house would not hesitate to purchase a block of $5,000,000, or $10,0000,000, or even $20,000,000, of municipal, county, or railroad bonds, knowing that it would be able to dispose of the entire block in the course of a few months in small lots to its regular customers.

Practically every large retail bond house in Wall Street now employs salesmen, who travel over the country selling bonds, very much as drummers sell tea or coffee. Some ot the largest houses employ as many as 40 salesmen; altogether, more than 300 are employed in Wall Street. Each has his own territory and possesses his own customers. Many make salaries of from $10,000 to $15,000 a year, and some even more. All are, to some extent, experts on values. In addition to employing salesmen the retail bond houses advertise extensively.

The reputation of a bond house, and the following which it possesses among investors, is its principal stock in trade. The

majority of the customers of a bond house purchase securities from it, not because of personal and expert knowledge of the security and safety of the bonds, but because of the reputation of the house. The average investor, whether he invests $5,000 or $500,000 a year, after a superficial examination, purchases securities almost entirely on the recommendation of his bond dealer. The enormous profits the bond dealers make is the price they charge for lending this credit to corporations and municipalities. Practically every one of the leading Wall Street bond houses may boast that no investor has necessarily ever lost a single dollar through the purchase of bonds on their recommendation. With such a record, is it any wonder that, when such a bond house offers a block of bonds for sale, accompanied by a recommendation, that the entire issue is often oversubscribed within twenty-four hours of the opening of the books?

ERRATA

Page 13, ninth line, should read, "in 1892, $585,000,000."

Page 34, fourth line, should read, "temporarily decreased."

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Nelson, Samuel Armstrong (ed.)
The bond buyer's dictionary.

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